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WESTPAC TRIP.—VADM D.L. Custis, MC, USN (left), Surgeon General of the Navy, visits U.S. Nav Hosp Guam, M.I., accompanied by CO, CAPT D.P. Bernard, MC, USN.

from the Chief

Francis Bacon long ago spoke of the human understanding as an irregular mirror which distorts and discolors: "Numberless are the ways," he wrote, "in which affections color and infect the understanding."

Fortunately the aberrations are usually more relative than absolute, and men of good will make conscious effort to minimize distortion. Good leaders know that understanding and participation are interdependent, and incumbent upon, both those who lead and those who follow.

A short time ago I read a letter written by a disgruntled young physician who had just completed his obligated service in one of our naval hospitals. My copy was one of several which he had addressed to a wide assortment of prominent officials. Whatever constructive opinions he might have offered were lost in his vituperation. He unwittingly portrayed a nurtured malcontentedness clearly beyond all reason.

Several days later there followed another carbon copy. In answer to the aforementioned assailant, this letter had been written by one of our commanding officers who had recently arrived at his new duty station, the hospital in question. Within it is a message so meaningful, and so well expressed, that I have obtained the author's permission to share it with you in this column.

Your letter focuses on the dissatisfactions (which I venture to hope are not universally shared) of a well trained junior officer, in the service for a relatively short period. Without attempting to go into detail, I should like you to appreciate the point of view of the physicians who were in the service before you came, and who remain now that you are gone. These physicians, most of whom are also well trained and board certified, performed the duties which you found so onerous when they themselves were junior officers. They have served in ships and overseas, separated from family. They practice in outmoded facilities, often in locations not of their choosing.

For many years their pay has compared very unfavorably with that of their civilian counterparts. Even now the approved pay increase has not been implemented, and some officers are actually receiving less pay than they previously

were. I have had the opportunity to practice medicine both in civilian life and in the Navy, and have certainly not found the general run of military medical officers lacking in zeal or dedication. Speaking personally, I believe you do these officers a disservice by circulating wide-ranging assertions concerning their productivity in a letter to government officials. It is far better, I believe, to explore the issues in discussion at the most local appropriate level.

Shortly after my arrival I prepared and distributed a questionnaire, a copy of which I have enclosed. The distribution of the questionnaire took place at a general meeting of medical officers, at which many of the issues you have raised were discussed. As a result of the discussion and the response to the questionnaire, I believe that the total workload can be encompassed with the number of physicians presently on board. Whereas some redistribution of the workload is in progress, I do not subscribe to the idea that the most effective distribution of the work is to divide the watches, clinics, and other assignments without regard to specialty, degree of training, or military seniority. Instead, I believe the ideal is to have each physician do what he is best trained for, and what he likes to do, to the extent that this is possible. Where the ideal cannot be met, such factors as availability, capability, and suitability are determinants in assignment. You may be sure that I intend to have every officer, regardless of seniority, fully employed.

In this regard, it seems to me on the basis of my short time here that there is an inordinate concern on the part of many of our medical officers about what their fellow officers are doing, rather than what they are doing themselves. It is my hope that through group discussions and the redistribution of duties, to which I have referred, this emphasis will change.

This commanding officer not only responded excellently to a difficult situation, but also clearly reiterated one of the basic tenets of good management. All of us have been dissatisfied with our duties at one time or another, but I think all will agree that where we have had the opportunity to participate in decisions affecting our welfare, our dissatisfaction has been minimal.

The resource and policy parameters within which our activities operate are provided by this Bureau, and higher levels of authority. Management decisions at the hospital, clinic, or other field facility are the prerogative of its commanding officer, officer in charge, or senior medical/dental officer. The manner in which he exercises this prerogative is vital, for although he holds the authority to make all decisions and can be right in every one, he will be sadly ineffective unless those decisions are accepted.

We must make known to all of our members, career oriented or not, that Navy medicine and dentistry need not only their skill, but also their interest, understanding, and counsel.

Reduced to its simplest terms this letter formulates a well recognized management equation:

COMMUNICATION + UNDERSTANDING + PARTICIPATION = ACCEPTED DECISION.
It's one we all need to practice.





THE SECRETARY OF THE NAVY
WASHINGTON

NAVY BIRTHDAY 1974 - A PROUD TRADITION

As our Navy celebrates its 199th Birthday, we are in the midst of important changes in the Navy as we know it: the modernization of our Fleet, the realignment of certain command and support organizations, severe fiscal constraints, the realities of the All-Volunteer Force, and the dramatic expansion of the Soviet fleet.

But throughout the past year the United States Navy has met each challenge, answered each call, and, in every case, lived up to the finest traditions of its 199 year history. In fact, it is during times of crisis and challenge that our Navy's proud tradition has its greatest influence.

For almost two centuries American patriots have sailed the oceans of the world, under sail, coal, steam and nuclear propulsion, in ships of wood and ships of steel, in a constant vigil to protect this nation and its vital interests abroad from foreign aggression.

That tradition is embodied today in every Navy man and woman whose patriotism, dedication to serve, and diligence in the performance of duty are still, as they were in 1775, America's first line of defense. Those of you who have stepped forward to serve your country should know that your vital role is recognized all across this country. And as our Navy meets the challenges that face us on this 199th Birthday, we should take strength from our Navy heritage, match the commitment of our forebearers with our own, and rededicate ourselves to carrying the proud tradition of our Naval Service into the unforeseeable future.

J. William Middendorf II

J. William Middendorf II



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON 25, D. C.

IN REPLY REFER TO

Navy Birthday 1974 - A Proud Tradition

Tradition has always been the enduring strength of the Naval Service because tradition has its roots in the actions of people. Throughout the Navy's nearly two centuries of growth, the individual deeds that have given birth to naval traditions have, at times, fired the imagination of the entire world and settled forever in the pages of our nation's history. On other occasions, far more numerous over the years, countless individual acts of courage and sacrifice have often remained unrecorded, perhaps even unnoticed, but have been no less a vital part of the Navy's tradition-making process.

In each instance the motivating force has been the same--the professional commitment to duty by a Navy man or woman, military or civilian, in a spirit of pride in self, pride in the Naval Service and pride in our country. It is that heritage of commitment, of course, that is the very cornerstone of tradition. Time and again since our birth on 13 October 1775, our Navy's progress has re-affirmed that professional commitment is our proudest achievement.

Navy Birthday 1974 is both a celebration of the Navy's commitment to its own people and a pledge of continued commitment to the people of our nation. It is also a time of reflection and expectation as we pause to honor the Navy's tradition-makers of the past and present, and dedicate ourselves, in a spirit of camaraderie and unity, to the tradition-makers of the future.

J. L. Holloway III
J. L. HOLLOWAY III
Admiral, U.S. Navy

MYOCARDIAL REVASCULARIZATION

at
the

National Naval Medical Center

By CDR Halbert E. Ashworth, MC, USN*

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and

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Direct myocardial revascularization using aorto-to-coronary-artery saphenous vein bypass grafts has now been widely accepted in the treatment of coronary artery occlusive disease. The first coronary artery bypass (CAB) procedure accomplished at a Naval hospital was performed on 13 October 1970 by CAPT James J. McHale, MC, USN at the National Naval Medical Center, Bethesda, Md. By 7 August 1973, 100 patients had been operated upon. Reports on those patients, in combination with the objective and subjective follow-up findings in the case of 76 patients who have had repeat cardiac catheterization, are considered in the present paper.

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The opinions or assertions contained in the above paper are those of the authors and are not to be construed as official, or as necessarily reflecting the views of the Navy Department or the naval service at large.

CLINICAL MATERIAL

All patients were evaluated preoperatively by the cardiology service. The patients were recommended for surgery following acceptable demonstration of coronary anatomy suitable for bypass grafting, through the use of selective coronary angiography. Four categories of symptoms were identified in those patients selected for operation:

1) *Incapacitating angina pectoris*, that is, angina which significantly limits activity despite medical management. All patients were categorized as New York Heart Association (NYHA) Classification III or IV, except for two individuals with critical main left coronary artery blocks who were assigned Class II. There were 64 patients in this group.

2) *Preinfarction angina pectoris*, that is, severe angina of sudden onset or exacerbation of mild stable angina, to the point of angina at rest or nocturnal angina without evidence of recent myocardial infarction. There were 29 patients in this category.

3) *Patients undergoing heart valve replacement* in whom significant coronary artery lesions were demonstrated on selective coronary angiography. All of these patients had symptoms of angina pectoris superimposed upon the symptoms of valvular heart disease. There were 5 such patients.

4) *Patients undergoing resection of symptomatic ventricular aneurysms*, who also presented significant lesions in the coronary arteries. There were 2 patients in this group.

Ninety-three patients were males and 7 were females. Their ages ranged from 26 to 83 years, with an average age of 46.5 years. (See Table I) Previously documented myocardial infarctions had occurred in 42 patients. Thirty-two patients were on active military duty.

TABLE I
AGE DISTRIBUTION

	Number	Age Range	Average Age
All patients	100	26-83	46.5
Males	93	28-83	44.6
Females	7	26-66	47.1
Active duty	32	28-52	39.4
With valve replacement	5	52-83	61.0

TECHNIQUE

Cardiopulmonary bypass with moderate hypothermia (28-30°C.) was employed in all cases. The distal anastomoses were accomplished with the heart fibrillating. Initially, an interrupted-suture technique using 6-0 silk was employed at the distal anastomosis. We now utilize a running suture of 7-0 Prolene. The proximal anastomosis at the aorta has also been modified. At first triangles were cut from the aortic wall, but this maneuver frequently made the anastomosis difficult to achieve. Knife slits in the aorta were subsequently employed in a series of patients, but the technique was abandoned when a high rate of graft failure was associated with this procedure. Currently we remove a 5-mm. button of aortic wall with a sharp rongeur. The proximal anastomoses are made with a running 5-0 Prolene suture technique. Using electromagnetic probes, flows were measured in all the grafts.

Single CAB grafts were accomplished in 46 patients, 43 received double grafts, and 11 patients received triple grafts. Except for 9 internal mammary artery to coronary artery anastomoses, all grafts were constructed from reversed saphenous veins removed from the thigh. Early in the series, single or double internal mammary artery implants into the left ventricular muscle were performed in 7 patients in addition to CAB grafts.

MORTALITY

There were 5 deaths within 30 days of operation — an operative mortality of 5%. Two of these deaths were intraoperative. A third death resulted from irreversible arrhythmias during the day of operation. The fourth death was occasioned by acute infarction on the 11th postoperative day, and the 5th death occurred on the 14th postoperative day as a result of *Pseudomonas* pneumonia and mediastinitis following tracheotomy.

There have been three late deaths. One death occurred 2 months postoperatively, a probable instance of arrhythmia in a patient who had undergone resection of a ventricular aneurysm, for repeated episodes of ventricular tachycardia and fibrillation. Another death occurred at 8 months postoperatively, when the patient sustained a myocardial infarction during repeat cardiac catheterization. The last death occurred 16 months postoperatively, incident to myocardial infarction — the third episode of infarction following operation on this particular patient.

MORBIDITY

Postoperative morbidity was high. Out of the 100 patients, 49 patients suffered a total of 65 major complications. (See Table II) Of the 3 operative deaths,

TABLE II
COMPLICATIONS IN 49 OUT OF 100 CAB PATIENTS*

Arrhythmias	
Atrial	5
Ventricular	7
Myocardial infarction	16
Congestive heart failure	3
Pulmonary	2
Postoperative hemorrhage	8
Thrombophlebitis	4
Wound infection	1
Hepatitis	3
Wound dehiscence	6
Neurological	
Minor	1
Major	2
Post-pericardiotomy syndrome	2
Other	5
Total:	65

*Of these 49 patients, some developed multiple complications.

one resulted from ventricular arrhythmias, one was attributed to myocardial infarction, and one was caused by pneumonia and mediastinitis.

Electrocardiographic (ECG) evidence of myocardial infarction was obtained immediately postoperatively in 16 patients. The ECG findings were not substantiated by a rise in cardiac enzymes, however. The ECG evidence of infarction correlates well with the follow-up angiographic studies, in that the grafts were demonstrably closed in the areas of infarction, in 12 of the 15 patients who were studied. All of these patients are living.

REEVALUATION

Extensive follow-up evaluation of 76 patients included the following determinations:

- 1) subjective status as determined by a change in the patient's New York Heart Association (NYHA) classification, assigned by the cardiologist before and after operation;
- 2) routine physical examination, resting electrocardiogram, and chest X-ray studies;
- 3) the multistage treadmill exercise test using the method described by Bruce; and
- 4) selective coronary angiography and left ventriculography. The follow-up time period ranged from 9 to 132 weeks following operation, and averaged 33.5 weeks or 7.8 months.

SUBJECTIVE RESULTS

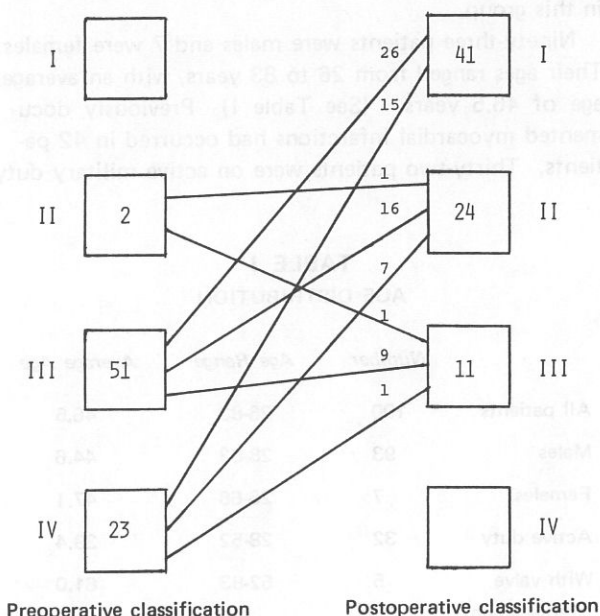
Subjective results were classified as *good* if the patient was free of angina, *fair* if some angina persisted but exercise tolerance improved, and *poor* if there was no improvement in angina. At the time of reevaluation, 50 (65.8%) patients were considered to have a good subjective result. Seventeen (22.4%) patients had a fair result, and 9 (11.8%) patients were classified as having a poor result. In only one instance was angina more severe following operation. Symptomatic improvement was present in 88% of the 76 reevaluated patients. Table III illustrates the sum of NYHA classification changes observed following operation.

OBJECTIVE RESULTS

Exercise treadmill testing of 41 patients was conducted before and after operation. Of the 36 patients with positive preoperative tests, 26 (72.2%) had negative

TABLE III

Changes in NYHA Classification Following Operation



tests postoperatively. The test remained positive in 10 (27.8%) patients. Negative preoperative tests remained negative when repeated postoperatively in 5 patients. No patient had a negative test preoperatively that became positive when repeated postoperatively. Of the 67 patients tested postoperatively, 50 (74.6%) had negative exercise treadmill tests.

The 76 patients who underwent repeat selective coronary angiography had received a total of 124 grafts. The patency rate in the 35 patients who had received single CAB grafts was 71.4%. In the 34 patients who had received double CAB grafts, the patency rate was 73.5%; in the 7 patients who had received triple CAB grafts, only 33.3% of the grafts were patent. The overall patency rate was 66.1%, with 82 of the 124 grafts being open. At least one graft was open in 78.9% of the patient group.

COMMENTS

There is an apparent discrepancy between the 88% symptomatic improvement rate, and the 78.9% demonstration of at least one patent graft. This can probably be explained by the known placebo effect of an operation, and more importantly, by the fact that 8 patients now free of angina had sustained intraoperative

or postoperative myocardial infarction under controlled conditions, thus eliminating their anginal focus.

The effects of coronary artery bypass procedures on prolonging life expectancy in these patients has not been determined. At the time of this writing, 145 patients have been operated upon. There have been no further operative or late deaths, thus, in the years during which the operation has been performed at the National Naval Medical Center, there have been 5 operative deaths (3.4%) and only 3 late deaths (2.1%), with a total mortality rate of 5.5%.

The overall graft patency rate of 66.1% is not as high as we would like it to be, but the above-mentioned modifications in technique have improved graft patency as demonstrated by a patency rate of 58.5% in the first 50 patients operated upon, and a patency rate of 74.6% in the second series of 50 patients. We feel that this rate will continue to improve.

ACTIVE DUTY PATIENTS

At the time of surgery, 32 of the first 100 patients were on active duty in the military service. Ages ranged from 28 to 52 years, with an average age of 39.4 years. The disposition of these patients has varied. Two have died: one early, and one at 16 months following surgery. Some have served 20 years on active duty and have voluntarily elected to retire. Others have remained symptomatic and have been retired by reason of physical disability. Ten patients, however,

have returned to full active duty and 2 are still in a limited duty status.

We feel that selected patients with limited, localized, coronary artery disease, who have had successful myocardial revascularization, should be returned to full duty if they are strongly motivated to do so. They should be asymptomatic, NYHA Class I patients, whose grafts have been demonstrated to be patent and whose exercise electrocardiograms are negative after a period of limited duty for 6 months to 1 year. Presently, 40 to 50% of active duty patients are being returned to duty.

CONCLUSIONS

Coronary artery bypass procedures have been effective in relieving angina pectoris in selected patients with ischemic heart disease. In our first 76 restudied patients, symptomatic improvement was obtained in 88% and complete relief of angina was reported in 65.8%. Overall graft patency was 66.1%, and at least one graft had remained open in 78.9%.

Operative mortality was low (5% or less), but morbidity was high. Mortality and morbidity rates should improve as surgical technique and patient selection are improved.

Myocardial revascularization can benefit the naval service by making it possible to retain on active duty certain valuable personnel whose services would otherwise be lost through forced medical retirement. 📄

IS YOUR BIOGRAPHY CURRENT?

The attention of all officers is invited to BUPERSMAN 5020140 — *Photographs and Biographies of officers*. This article requires that a *current* biography and photograph of each officer be kept on file at the Bureau of Naval Personnel with submission to be made upon original appointment, at each promotion, and at least every ten years. The biographies and photographs are for official use only, and can be used in a variety of ways to benefit the officer.

It has become evident that many biographies and photographs are seriously out of date. In one instance, biographical data and a current photograph were required on a senior officer and a recent selectee for promotion. The information was needed in connection with selection for a school program. Neither the biography nor the picture had been updated since 1957 — when the officer was a lieutenant. Obviously, this very outdated information served no useful purpose.

It may take a few minutes of your time, but submitting a current biography and photograph will serve your own best interests and will greatly reduce the administrative workload on those who must request updated information from officers on an individual basis. — *The Officer Personnel Newsletter* 18(2):9, Dec 1973. 📄

Bone Resorption Associated with Intra-Oral Granuloma:

Report of Two Cases

By CAPT Elgene G. Mainous, DC, USN*

and

LCDR Gary L. Smith, DC, USN**

Granuloma pyogenicum is a common intra-oral lesion. However, its clinical appearance and rapid growth can mimic a malignant neoplasm. While local bone resorption has not been reported to be associated with this lesion, the two cases reported here demonstrate a marked degree of bone destruction and remodeling.

CASE NO. 1

A 52-year-old Mexican-American female was referred to the Dental Service, Naval Regional Medical Center Long Beach, for evaluation of a soft tissue mass situated in the right maxillary vestibule. The mass was described as nonpainful, had been present for approximately two weeks, and had undergone rapid growth. Examination revealed a 3 x 5 cm exophytic mass in the right maxillary vestibule. (See Figure 1) The surface was reddened and irregular, without ulceration. From the sulcus anterior

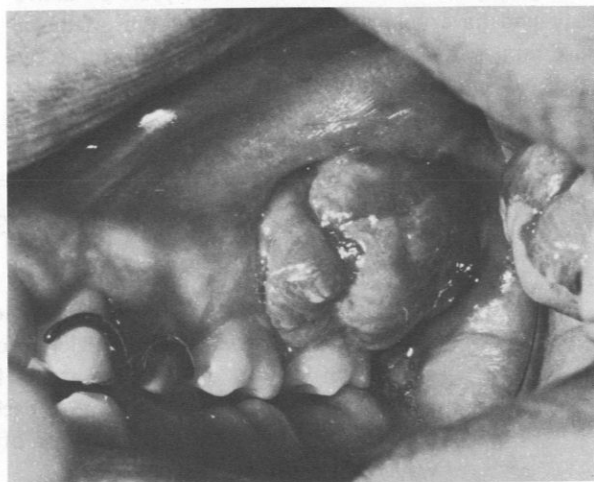


Figure 1.—Exophytic mass in the right maxillary vestibule, presented in Case No. 1.

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The opinions or assertions contained herein are those of the authors and are not to be construed as official, or necessarily reflecting the views of the Navy Department or the naval service at large.

to the right maxillary first molar, the mass extended posteriorly to include the tuberosity, and lingually to encroach upon the soft palate. (See Figure 2) The superior margin of the mass extended to the depth of the right buccal sulcus. Panorex radiography revealed bone destruction of the floor of the right maxillary

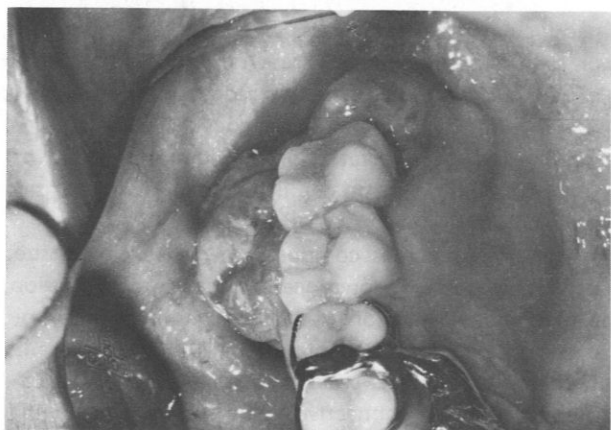


Figure 2.—Extension of soft-tissue mass into the tuberosity with encroachment on the soft palate. (Case No. 1)



Figure 3.—Panorex radiograph reveals bone involvement presented in Case No. 1.

sinus, and generalized periodontal disease. (See Figure 3) Submental vertex and paranasal sinus radiographs revealed apparent erosion of the right maxillary tuberosity, and the posterior wall of the right maxillary antrum. Tomograms of the pterygoid plates disclosed no evidence of pathology.

The patient was admitted to the hospital on 12 June 1972, for treatment. Past medical and surgical histories were noncontributory to her present illness. Routine blood, serology (fluorescent treponemal antibody absorption), electrolyte, liver function, skin, and urine tests were within normal limits, as were the blood calcium, phosphorus and alkaline phosphatase determinations. Chest X-ray studies were within normal limits.

Ophthalmology and ENT consultations on admission contributed the clinical impression of probable neoplastic disease with extension into the zygoma, and questionable density of the right orbit. On 14 June 1972, under local anesthesia, the right maxillary first and second molar teeth were extracted and an incisional biopsy of the mass was performed. The complete excision was staged, pending final diagnosis based

on histopathological study of the tissue. Histologic examination revealed chronic inflammation and granulation tissue, without evidence of neoplasm.

On 21 June 1972, under general anesthesia, the intra-oral mass was excised and the right maxillary antrum was explored using the Caldwell-Luc approach. The right maxillary antrum appeared normal with the posterior wall intact, but displaced anteriorly. No oro-antral communication could be demonstrated at the site where the mass had been excised. The surgical site healed in a satisfactory manner. The histopathologic diagnosis was pyogenic granuloma, characterized by chronic granulation tissue composed of proliferating endothelial buds, plump fibroblasts, numerous small dilated blood vessels, and a chronic inflammatory cell infiltrate with an underlying mass of loose fibrous connective tissue.

CASE NO. 2

A 34-year-old male was referred to the Dental Service, Naval Regional Medical Center Long Beach, for closure of a left oro-antral fistula. The patient gave a past history of having had his left maxillary third molar tooth extracted in February 1973. Two weeks post extraction, purulent drainage from the extraction site was noted. A Panorex radiograph, with a gutta-percha point inserted in the extraction site, demonstrated an apparent oro-antral communication. (See Figure 4)

An X-ray examination in the Waters position suggested the presence of a mass in the left posterior maxillary antrum. (See Figure 5) Intra-oral clinical examination revealed a partially healed left maxillary third-molar extraction site, with a protruding soft-tissue mass. A 10-mm periodontal pocket was present at the distal aspect of the maxillary second molar. Closure of the oro-antral communication, in conjunction with extraction of the maxillary second molar and a Caldwell-Luc procedure, was planned. During surgery following



Figure 4.—Panorex radiograph with gutta-percha point inserted in the previous extraction site. (Case No. 2)

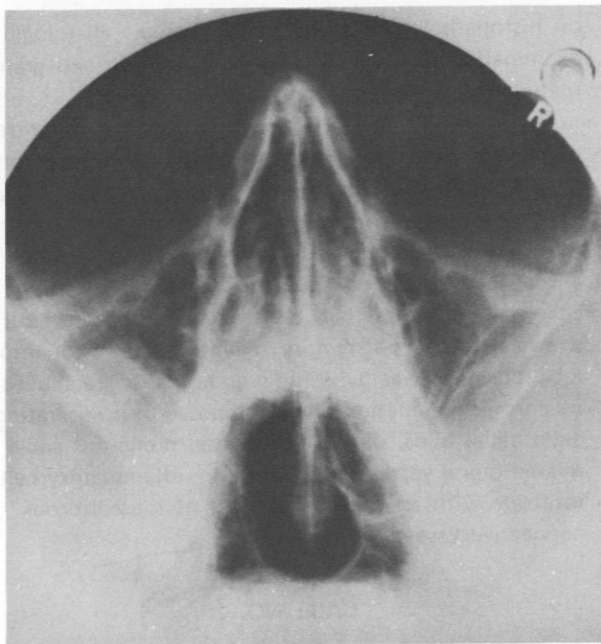


Figure 5.—X-ray examination, Waters view, reveals mass in the left posterior maxillary antrum presented in Case No. 2.

extraction of the left maxillary second molar and elevation of a mucoperiosteal flap from the lateral wall of the left maxillary sinus, a soft tissue mass was seen to extend from the healing third-molar extraction site superiorly, to a point anteriorly at a distance of approximately 3 cm. The posterior wall of the left maxillary antrum was displaced anteriorly and had a smooth, intact, bony surface. No oro-antral communication was found. The soft tissue mass was removed, and subsequent histopathologic examination of the tissue revealed fibrocollagenous connective tissue, granulation tissue, and chronic inflammation. Postoperative healing was satisfactory, and postoperative roentgenographic studies revealed normal aeration of the left maxillary antrum.

DISCUSSION

Pyogenic granuloma is thought to represent an exuberant inflammatory-tissue response to invasion of nonspecific microorganisms as a result of trauma to the tissue.¹ The lesion arises most often on the gingiva, but may also be found on the lips, tongue, and buccal mucosa. It usually presents as an elevated,

pedunculated or sessile mass with a lobulated, smooth, or even a warty surface. Depending upon the degree of vascularity it may be deep red or purple in color; it is painless, and soft in consistency. It may develop rapidly and remain static for an indefinite period of time. The lesion is variable in size, and no age or sex predilection has been noted.²

Histologically it is composed of granulation tissue; depending upon the presence or absence of ulceration, a moderate infiltration of polymorphonuclear leukocytes, lymphocytes and plasma cells may be present. If the lesion is not excised, the capillaries may be obliterated and the connective tissue may mature, giving the appearance of a fibroma. The presence of an underlying mass of fibrous connective tissue may indicate a more mature pyogenic granuloma.³

SUMMARY

Surgical removal is the treatment of choice for the pyogenic granuloma, with careful excision beneath the base of the lesion. The fact that the pyogenic granuloma is not encapsulated often results in its incomplete removal, with a likely possibility of recurrence. The recurrent tumor grows rapidly and attains the maximum size in the same fashion as the primary lesion. Malignant transformation is not a consideration, even in the recurrent lesion.⁴

Although local bone resorption has not been associated with pyogenic granuloma, the two cases reported herein demonstrated marked bone resorption and antral wall remodeling, adjacent to the lesion. The radiographic appearance of bone destruction and maxillary sinus involvement in these two cases prompted an aggressive surgical approach to ensure adequate treatment.

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BIRTHDAY TRADITION 1974

SCOLIOSIS: Diagnosis and Management in the Military Population

By CDR Alvin H. Crawford, MC, USN

INTRODUCTION

By virtue of the impressive extent of the San Diego Naval Regional Medical Center complex (including medical support of the Naval Training Center, Miramar Naval Air Station, Imperial Beach Naval Air Station, Coronado, North Island Naval Air Station, and Point Loma Submarine facility), the pleasant year-round climate which attracts a large retirement population, and the number of surrounding military bases from just south of San Francisco to Yuma, Arizona on the east, the naval hospital staff has access to a patient population of a size and diversity which are the envy of our civilian counterparts. We also represent the major military teaching complex in the Southern California area.

As in any other large population, be it civilian or military, there is a significant statistical incidence of scoliosis in the dependent segment. Somewhat nomadic in character, the military, and especially the Navy tend to be transient, except for the retired sector. Accordingly we see a number of patients with scoliosis, treated and untreated. Since these individuals comprise a specific group of patients in a select (military) population, an ideal situation is created for formulating an in depth and detailed study of curvature of the spine. As with any transient population, there arises a trying problem of record keeping associated

with a disease requiring longitudinal follow-up. Often there is a total lack of follow-up data, because of the very brief and fleeting contact with transients and reservists who have no local address that could in any way be deemed permanent. Permitting patients to keep their own charts usually fails to eliminate the recordophagia of the socialized system; central appointment desks regularly open a new "temporary" chart that serves to get a patient seen for the moment, but in no way contributes to a more rigid maintenance of record keeping for follow-up and informational background.

THE SCOLIOSIS CLINIC

Objectives

Undaunted by these obstacles to continuity in medical care at Naval Hospital San Diego, we have established a scoliosis clinic with the following goals:

1. Provision of care and management of scoliosis, in accord with concepts currently held by medical centers that are actively treating this disease worldwide
2. Refinement of record keeping
3. Assimilation of data to establish an ongoing approach to the problem, accommodating other physicians (civilian or military) who may become involved at any stage of treatment, and who may need to identify previous aims of clinical management
4. Centralization of record keeping for future study and recall, if desired.

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The opinions or assertions contained herein are those of the author and are not to be construed as official, or as necessarily reflecting the views of the Department of the Navy or the naval service at large.

SCOLIOSIS EVALUATION			
NAME: _____			
DATE OF BIRTH: _____			
AGE: _____ SEX: _____ SSN: _____			
AGE CURVE FIRST NOTED: _____			
PROGRESSION: YES___NO___			
CHIEF COMPLAINT: _____			
HISTORY OF PRESENT ILLNESS: _____			
PAIN: _____			
LOCATION OF PAIN: _____			
BIRTH HISTORY: _____			
PRENATAL: _____			
PERINATAL: _____			
FAMILY HISTORY:			
SCOLIOSIS	FATHER	YES___NO___	
	MOTHER	YES___NO___	
	SIBLINGS	YES___NO___	
FOLLOW-UP	X-RAYS	YES___NO___	
CAFÉ AU LAIT SPOTS		YES___NO___	
PAST HISTORY			
CHRONIC CARDIOPULMONARY			
DISEASE		YES___NO___	
PREVIOUS THORACIC SURGERY		YES___NO___	
POLIO		YES___NO___	
MYELOYDYSPLASIA		YES___NO___	
C.P.		YES___NO___	
IRRADIATION (TUMOR, ETC)		YES___NO___	
TRAUMA		YES___NO___	
HYPERMOBILE JOINTS		YES___NO___	
DERMATOMYOSITIS		YES___NO___	
ASYMMETRICAL LEGS		YES___NO___	
REVIEW OF SYMPTOMS			
G.I.			
G.U.			
JOINTS			
MENSTRUATION YES___NO___			
MENARCHE			

Figure 1.—Scoliosis Evaluation Form, page 1.

PHYSICAL EXAMINATION			
HEIGHT_____WEIGHT_____			
GAIT			
STANCE			
PLUMB LINE (OCCIPUT-NATAL CLEFT)			
SHOULDER SYMMETRY			
CHEST SYMMETRY		CHEST EXPANSION	
CLINICAL SPINAL ALIGNMENT			
STANDING			
TYPE CURVE			
CLINICAL EXTENT OF CURVE			
FLEXIBLE		YES___NO___	
RAZORING		YES___NO___	
DIMPLING OR HAIRY NEVI		YES___NO___	
EXTREMITIES			
ABNORMALITIES		YES___NO___	
JOINT LAXITY		YES___NO___	
FOOT ABNORMALITIES		YES___NO___	
MEASUREMENT		RIGHT	LEFT
UMBILICUS-MEDIAL MALLEOLUS		_____	_____cm
*ASIS-MEDIAL MALLEOLUS		_____	_____cm
RANGE OF MOTION			
HIPS		RIGHT	LEFT
ABDUCTION		_____	_____
ADDUCTION		_____	_____
FLEXION		_____	_____
FLEXION INT ROTATION		_____	_____
FLEXION EXT ROTATION		_____	_____
EXTENSION INT ROTATION		_____	_____
EXTENSION EXT ROTATION		_____	_____
HIP FLEXION CONTRACTURE		YES___NO___	
DEGREES		_____	_____
KNEE			
FLEXION		_____	_____
EXTENSION		_____	_____
ANKLE			
DORSIFLEXION		_____	_____
PLANTAR FLEXION		_____	_____
SUBTALAR MOTION			
NEUROLOGICAL EXAM			
REFLEXES			
MUSCLE TESTING (if indicated)			
BABINSKI			
SENSATION			
*Anterior superior iliac spine			

Figure 2.—Scoliosis Evaluation Form, page 2.

Record Forms

There are 140 patients currently enrolled in our scoliosis clinic. They are usually referred for consultation, or at the suggestion of gym teachers, as a result of a chest X-ray study, or by request of mothers concerned with their daughters' "poor posture." On admission to our clinic, a basic intake-evaluation form is completed. The latter form is used in assessing any patient seen in our clinic for the first time, even if treatment is already underway — with a Milwaukee brace, or during phases of observation, or in a postoperative spinal fusion status. The form incorporates selected features of standard forms used by scoliosis clinics throughout the country; the information documented includes vital statistics, the age at which spinal curvature was first noted, and the pre- and perinatal birth history. The mother's siblings and patient's siblings are considered in the family history, in addition to the incidence of café au lait spots. (See Figure 1) In the past medical history attention is directed to: chronic cardiopulmonary disease, previous thoracic surgery, poliomyelitis or other neurologic diseases, myelodysplasia, cerebral palsy, irradiation, hypermobile joints, dermatomyositis, limb-length discrepancy, gastrointestinal disorders, trauma, and menstruation. Report of the physical examination includes height, weight, gait, stance, symmetry, alignment, presence of fixed razorback deformities, limb lengths, joint ranges of motion, and basic neurological reflexes. (See Figure 2)

X-ray studies are performed to determine the extent of the curve via Cobb's measurements, in the standing and recumbent positions. If any treatment other than observation is deemed advisable, the patient is admitted to the hospital for further investigation including bends, tilts and traction X-ray examinations, as well as pulmonary function studies, dental exams, and clinical photographs. If routine X-ray examinations reveal spinal defects such as segmental variation, myelogram and intravenous pyelogram (IVP) studies may be indicated. (See Figure 3)

The curve is then categorized by location and pattern, i.e., right dorsal, left lumbar, etc. A diagnosis favoring idiopathic, congenital, paralytic, or other cause is made, and planned treatment is outlined. Therapeutic modalities include observation, Milwaukee bracing, surgery (epiphysiodesis for compensatory scoliosis, for example, or even leg shortening in the case of skeletal maturity). (See Figure 4)

A very valuable portion of our chart deals with the patient's sponsor and includes such data as his present and past duty stations, home of record, and next of kin (not to include his wife). (See Figure 5)

RADIOLOGICAL EVALUATION	
EXTENT OF CURVE (s)	
APEX OF CURVE (s)	
CURVE MEASUREMENT	
STANDING	
BENDING	
TRACTION	
ILIAC CAPPING	NONE _____
	INCOMPLETE _____
	COMPLETE _____
	FUSED _____
SKELETAL DEFECTS (SPINE)	
	_____ NEURAL ARCH
	_____ VERTEBRAL BODY
	_____ SEGMENTAL VARIATION
	_____ KYPHOSIS
	_____ SPONDYLOLISTHESIS
	_____ SPONDYLOLYSIS
	_____ LORDOSIS
SKELETAL DEFECTS (OTHER)	
_____ RIB ANOMALIES	_____ UPPER EXT.
_____ PELVIS	_____ LOWER EXT.
SPECIAL X-RAYS	
_____ MYELOGRAM	_____ IVP
_____ CARDIAC SERIES	_____ VASCULAR
_____ PULMONARY	_____ OTHER
_____ G.I.	
PULMONARY FUNCTION STUDIES	YES___NO___
DENTAL EXAMINATION	YES___NO___
PHOTOGRAPHS	YES___NO___
DIAGNOSIS	
_____ IDIOPATHIC	_____ ADOLESCENT
_____ NONSTRUCTURAL	_____ JUVENILE
_____ CONGENITAL	_____ INFANTILE
_____ POLIO	_____ TRAUMA
_____ NEUROFIBRO	_____ MYELOYDYSPLASIA
_____ THORAGENIC	_____ MESENCHYMAL
_____ TUMOR	_____ KYPHOSIS
_____ RADIATION	_____ LORDOSIS
	_____ OTHER
CURVE PATTERN	
CERVICAL	
_____ RT THORACIC	_____ LT THORACIC
_____ RT THORACOLUMBAR	_____ LT THORACOLUMBAR
_____ RT LUMBAR	_____ LT LUMBAR
_____ DOUBLE	_____ PELVIC OBLIQUITY

Figure 3.—Scoliosis Evaluation Form, page 3.

TREATMENT	
OBSERVATION	_____
MILWAUKEE BRACE	_____
SURGERY	_____
OTHER	_____

Figure 4.—Scoliosis Evaluation Form, page 4.

SCOLIOSIS DATA COVER SHEET	
Patient: _____	
Street/Address: _____	City _____ State _____
Phone No. _____	Religion _____ Date of Birth _____
I.D. Card Number _____	Date of Expiration _____
Sponsor _____	Rate/Rank _____ Branch of Service _____
Duty Station Address: _____	
Phone No. _____	
Home of Record Address: _____	
Route, Box No., Phone No. (If Known) _____	
City _____	State _____ Zip _____
Next of Kin of Sponsor Not to Include Wife _____	
Expiration of Present Tour of Duty _____	
Expiration of Current Enlistment _____	

Figure 5.—Scoliosis Evaluation Form, the data cover sheet.

After the above information has been assimilated, the chart is filed and permanently retained in the clinic. This obviates the need for patients to bring in their chart on the next visit. When a new patient who began treatment elsewhere moves into our area and seeks further medical care, Xeroxed copies of all the records in his chart that relate to scoliosis are placed in our permanent chart, at the time of his initial visit.

CLINICAL PROCEDURE

Classification of our patients by age, sex, and curve type is beyond the scope of this paper, as is a detailed consideration of the actual number of patients wearing a Milwaukee brace, whom we see 3-4 times per year in conjunction with our local orthotist. Our current philosophy of treatment is consistent with that of Goldstein: Curves less than 20° receive observation only; Curves greater than 20°, but less than 50°, are treated with Milwaukee bracing and exercises; Surgical therapy is recommended when patients with curves of more than 40° are seen initially.

If surgical treatment is indicated, patients are admitted to the hospital two weeks prior to the scheduled surgery and are placed in Cottrelle traction. They are also seen in consultation by our anesthetist who initiates communication, and obtains appropriate pulmonary function and blood gas studies. Approximately two days prior to surgery, using the surcingle technique, a Risser cast is applied and then bivalved for use as a postoperative holding jacket. We use the Harrington distraction and compression instrumentation as the major correction force, and for temporary internal fixation. This method is accompanied by a meticulous fusion technique which is characterized by very wide exposure, wide and deep decortication of the vertebral segments, and the introduction of generous amounts of supplementary fresh autogenous iliac-bone grafts. Upon the completion of insertion of the Harrington instruments, patients are awakened under hypnotic control by the anesthesiologist, and functional monitoring of the spinal cord is accomplished by having the patients dorsiflex and plantiflex their toes on command. Postoperative patients remain recumbent for a period of six months.

COMMENTS

The efficiency of our record keeping has been greatly enhanced by centralization. When patients move to other duty stations or permanent locations, Xeroxed copies of our records are forwarded to cognizant physicians. Original records do not travel with the patients but are maintained in our permanent file for future research projects, papers, and other purposes. At the time of patient transfer, a request for yearly follow-up data or copies of future medical reports is forwarded to the next physician, in order to update our retained records.

Over the past 26 months we have treated 23 patients by posterior fusion; the anterior approach, utilizing the Dwyer instrumentation, was employed in treating one patient.

We propose that either singularly, or jointly, the medical departments of the respective services establish scoliosis centers (hopefully with residency training programs). Scoliosis patients could be evaluated and have appropriate treatment prescribed at these centers, where permanent records could be formulated and maintained to provide continuing follow-up of individual cases, ongoing evaluation of current treatment methods, and useful knowledge for future application. Reflecting a high degree of enthusiasm for this concept at Naval Hospital San Diego, we are currently formulating protocols for the management of congenital hip dislocation from infancy until maturity, and of Calvé-Legg-Perthes syndrome. ☛

A Weight-Control Clinic That Works

By LT Georgiana Marie Banellis, MSC, USN*

Chief, Clinical Nutrition Branch

Naval Hospital Memphis, Millington, Tenn.

INTRODUCTION

Many Americans are handicapped by obesity. According to a statistician with the Metropolitan Life Insurance Company, Dr. Louis Dublin, obesity "... can be a factor in employment, either because of the self-consciousness of the job-seeking overweight, or because of the preference employers may give to applicants who are of the normal weight. It is also a handicap in social relationships and may give rise to emotional problems."¹ Obesity can also contribute to the development and aggravation of specific ailments, such as heart attacks, atherosclerosis, hypertension, diabetes, gallbladder disease, impaired respiration, varicose veins, and even suicidal tendencies.

To counter the long-range ill effects of obesity, a Weight-Control Clinic was established in Nov 1973 at Naval Hospital Memphis, Tenn., under the direction of LT Georgiana Banellis, MSC, USN, chief of the Clinical Nutrition Branch. It was the first such naval clinic in the Memphis area.

Referred by physicians practicing in the various hospital outpatient clinics, these patients attend the prescribed weekly weight-control sessions. During their first session, attendees meet the members of the professional health-care team that supports the clinic: Navy chaplain CDR Don C. Alexander, who contributes

to group therapy sessions and provides emotional support; LT D.G. Berry, MSC, USNR, a physical therapist who discusses and demonstrates a daily exercise routine; LCDR Gloria G. Klefman, NC, USN, who assists with the presentation of lecture material and weekly weighings; and CAPT Italo Mazzarella, MC, USN, chief of medical services, who brings to medically oriented lectures the knowledge and understanding of a concerned physician.

Only 5 women attended the sessions when the clinic first opened; today 40-60 women participate each week. (Only one man has become involved since the program began.) The clinic is available to hospital inpatients and outpatients, active-duty and retired military personnel, and their spouses. Pregnant women are encouraged to defer active participation.



CHAPLAIN ON CALL.—Navy chaplain CDR Don Alexander regularly participates in group therapy sessions attended by members of the weight-control program at Nav Hosp Memphis. Here he discusses a point with Mrs. Ellen P. Seymore. (Photos by Richard Ramsey)

*Registered dietitian, and currently a master's degree candidate at Case Western Reserve University, Department of Nutrition, Cleveland, Ohio 44106.

The opinions and assertions contained in the above article are those of the author, and are not to be construed as official or reflecting the views of the Navy Department, or the naval service at large.

1. Dublin LI: Benefits of reducing. *Am J Public Health* 43:993-996, Aug 1953.



ALL ABOUT EXERCISE.—LT D.G. Berry, MSC, USNR, physical therapist at Nav Hosp Memphis, explains the importance of exercise in a weight-control program. Later, he will demonstrate specific exercises to firm body tissues and increase well-being.

Before patients may attend the clinic sessions they must undergo a thorough physical examination, during which exercise and dietary limitations are established. Only those candidates who are referred by a physician are accepted into the weight-control program.

COMMON DIET PATTERNS

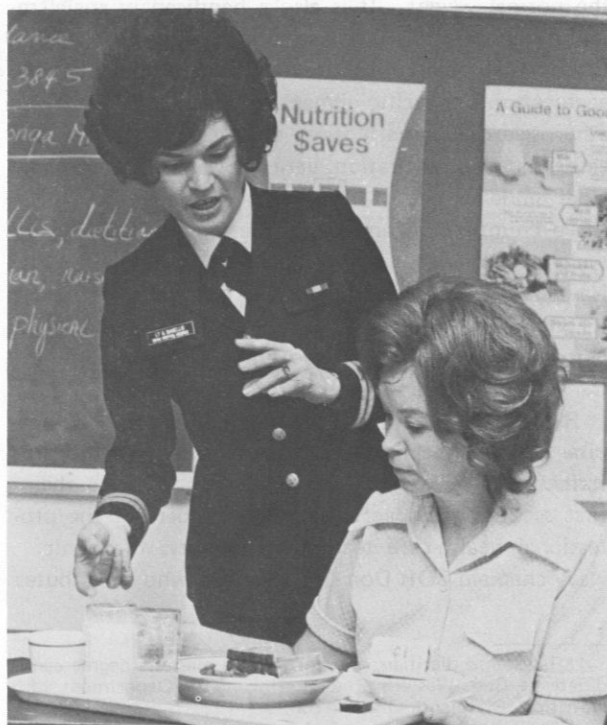
The clinic program combines a sensible low-calorie diet to encourage weight loss, with daily exercise to help firm body tissues. Under the watchful eye of the dietitian, a controlled food-intake plan is developed for each patient. Any dietary restriction can be incorporated into the plan. For example, a patient on a sodium-restricted, low-calorie diet will be guided in formulating meal plans commensurate with the severity of the sodium restriction that has been medically imposed.

Sodium restriction

Thus, a woman on a 500-milligram-sodium diet will be advised to purchase and use special low-sodium bread; her daily milk allowance will be restricted to 16 fluid ounces; her intake of meat will be limited to four ounces per day, and ham or other salt-cured meats or fish will be prohibited. Other modifications would include the use of unsalted butter or margarine, and a restriction of egg consumption to no more than one a day.

By comparison, a woman on a 2000-milligram-sodium, low-calorie diet may ingest up to three regular slices of bread and 24 ounces of milk per day; she is limited to two eggs, and three regular teaspoonfuls of margarine or butter. Both women would be advised to avoid commercially prepared canned vegetables and soups, and such high-sodium foods as salt-cured and smoked meats.

Diets are generally prescribed for daily sodium intakes of 500, 1000, or 2000 milligrams, the latter being specified most frequently. All patients on sodium-restricted diets are instructed not to use table salt; they are also warned against the use of sodium cyclamates, including diet beverages which contain sodium cyclamate as an artificial sweetener.



BREAKFAST BENEFITS.—LT Georgiana Banellis, MSC, USN (left), chief of the Clinical Nutrition Branch at Nav Hosp Memphis, discusses proper meal planning with Mrs. Sonja Mixon. LT Banellis organized the hospital's first weight-control clinic in Nov 1973.



SCALING DOWN.—LCDR Gloria Klefman, NC, USN (left) calculates the weight loss achieved by Mrs. Norma Knight, a patient in the Weight-Control Clinic at Nav Hosp Memphis, Tenn. This was the first such naval clinic established in the Memphis area.

Fat restriction

The low-calorie, low-cholesterol diet is generally well tolerated and accepted. The patient *must avoid* high-calorie saturated fats: butter, whole milk, cream, a variety of cheeses including cream cheese, ice cream, rich creamy pies, pastries, bacon, sausage, and all saturated fats contained in meat. Within the allowed number of calories, the patient *may consume*: polyunsaturated margarine, skim milk, fat-free cottage cheese, poultry, veal, fish, lean cuts of beef and pork, and up to three egg yolks per week. Patients on this low-calorie diet must rely on the less rich desserts, such as fruits.

Some individuals are required to cope with three common dietary restrictions — low-calorie, low-sodium, and low-cholesterol. This is not as formidable as it may at first appear. A patient who eliminates bacon from her diet because of a cholesterol restriction, for example, also eliminates a high concentrated source of fat, calories, and sodium.

Functional hypoglycemia

One overweight woman who attended the Nav Hosp Memphis Weight-Control Clinic also presented functional hypoglycemia. The dietitian calculated an acceptable, low-calorie, six-feeding-a-day meal plan for her. Such a diet must be carefully planned to achieve the correct balance of low carbohydrate, high protein, and moderate fat intake, divided into six appetizing meals each day. Due to a dysfunction of carbohydrate metabolism, the patient usually cannot tolerate any excess carbohydrate beyond the required blood sugar level, without noticing symptoms of hypoglycemia. Her body functions better on fuel that can be digested slowly, such as proteins.

The hypoglycemia patient in this instance was given a 1200-calorie diet with six feedings per day, including three meals and three snacks. The small amount of starch allowed in her diet consists chiefly of small crackers, bread, fruits, and fruit juices. The patient was also advised to use a sugar substitute, since her body absorbs concentrated sugar too quickly. Substantial amounts of protein foods, such as eggs, cheese, peanut butter, and meat, were also included in the diet.

Diabetic Diet Exchange List

The majority of women in the Weight-Control Clinic use the Diabetic Diet Exchange List, which was prepared in 1950 by a committee of the American Dietetic Association, and has been approved by the American Diabetes Association and the United States Public Health Service.² Food servings of similar nutritive composition and caloric equivalence are grouped together in lists, permitting patients to intelligently exchange one item for another in a given list; the 6 lists indicate exchanges for milk, vegetables (two categories of vegetables are used depending on the caloric and carbohydrate content), fruit, bread, meat, and fat. Rich desserts, and highly concentrated sources of carbohydrate and sugar are not included in the exchange lists because these patients are required to eliminate forbidden foodstuffs that contain abundant calories, but little nutrition. The prescribed caloric allowance permits a balanced, adequate diet, and allows the patient to select specific amounts of food from the 6 exchange groups. Small amounts of carbohydrate foods such as bread, potato, cereal, fruit, and fruit juice, must be included in the diet to supply the energy needed to produce body glucose. Vegetables, milk, and appropriate sources of protein and fat are also essential for optimum nutrition.

2. Mitchell H, Rynbergen H, Anderson L and Dibble M: *Cooper's Nutrition in Health and Disease*. 15th ed, p 305, Philadelphia, JB Lippincott Co, 1968.

THE CLINIC PROCEDURES

Daily intake of 1000, 1200, or 1500 calories is prescribed. (Physicians at Nav Hosp Memphis often allow the dietitian to determine the appropriate daily caloric intake for clinic patients, or to recommend a dietary plan consistent with the patient's age and customary physical activity.) Weekly records of body weight, food



CHARTING PROGRESS.—In a weekly evaluation session at the Nav Hosp Memphis Weight-Control Clinic, dietitian LT Georgiana Banellis, MSC, USN reviews a progress chart with Mrs. Betty J. Keller (left).

intake, and personal attitudes are documented by the patients, who also complete a self-evaluation designed to determine the reasons behind weight gain. Most patients seem to be acutely aware of the reasons why they overeat. Many blame their obesity on excessive food intake due to boredom, lack of interest, or "nerves"; others assert that, "Any kind of stress makes me eat." The self-evaluation exercise enables the professional health-care team to determine the underlying

basis of the problem, and alerts them to any significant emotional conflicts.

In weekly evaluation sessions, each patient prepares a progress report. During the 1st session, entitled "Weight Loss — Do You or Don't You," personal data including height, weight, and body measurements are recorded; patients also record their reasons for wanting to lose weight. At the 2nd session, emphasis is placed on exercise and motivation. The ideal body weight is calculated for each patient, the caloric expenditure for various exercises is determined, and body metabolism is also discussed.

During the 3rd session the dietitian explains the nutritional values of high-calorie and high-carbohydrate food, and establishes maximum weekly weight-loss objectives for each patient. Later, during the 4th session, participants consider a number of diet plans, nutritional values, methods of food preparation, and the health hazards inherent in certain diets. This session provides participants with basic information they will need on their own, to remain motivated and successfully control body weight in the future.

Special events and interesting projects serve to enliven the program. During National Nutrition Week the patients researched, evaluated and prepared critiques of selected commercial food products, and popular dieting and nutrition books. The women were readily able to distinguish between sensible and unreasonable approaches to weight loss, and to determine what food items were of greatest nutritional value. At the end of the project, they shared their findings in an informative panel discussion. Through such enlightenment many of the women became less gullible about diet and nutritional fads, and gained considerable confidence in their own ability to follow sound dietary principles.

After spending two months in the program, the women again record their body weight and measurements, as well as their own opinion of their personal progress. Weight losses ranging from 6 to 17 pounds over a 6-week period are typical; one extraordinary lady lost 16 pounds in a period of 4 weeks.

CONCLUSION

The clinic approach to weight control provides rewards for both patient and staff:

- The patients are now following well balanced, sensible diets, and are aware of the pitfalls of fad and gimmick diets.
- The dieters have proven to themselves that they can successfully lose weight on their own, without the need for expensive diet salons or special diet aids.

● The program is fully supported by staff physicians who have long known that obese patients are poor surgical risks, that weight loss before surgery can minimize complications, and that obesity invariably leads to medical trouble.

Do the women consider that their poor eating habits are permanently corrected? "No, I haven't cured myself yet," says one, "but I'm more in control." Another reports, "I am learning to refuse fattening things because I have built up a real desire to be smaller." 🍷

NAVY A PROUD 13 October BIRTHDAY TRADITION 1974



CAKE CUTTING.—At the Camp Pendleton Navy Day festivities in 1973, the Master Chief Petty Officers of the First Force Service Regiment, First Marine Division, Field Medical Service School and the Regional Medical Center did the honors. Pictured about the cake, in uniforms of the past and present, are (from left to right): HN John Turner, HN Todd, HN Michael R. Ross, HMCM G.H. Bates, HMCM C.B. Alexander, HMCM R.H. Williams, HMCM R.S. Grubb, HM3 M.T.H. Ford, HM3 Loomis, and HM1 C.A. Packham. (Photos by courtesy of NAVREGMEDCEN Camp Pendleton, Calif.)

We hope your observance of the official Navy Birthday this year equals that of Camp Pendleton in 1973.

At their 1973 Navy Birthday picnic, fortunate attendees joined their Commanding General, MGEN H. Poggemeyer, USMC, for a first-rate spread produced and served by the Naval Hospital Food Service Division, headed by LT R.E. Smith, MSC, USN. Mr. F. Martinez and Mr. D. Zim were the artists largely responsible for an elegant 160-pound construction, using 39 sq. ft. of cake. On a 6-ft. square sea bed of 4-inch cake covered by foaming iced ocean with miniature fleet and hovering sea gulls was placed a 4-ft. high, four-armed, gold anchor. Atop the blunted bill of each fluke rested a 4-in-thick cake measuring 8 x 12 in. Two WWII-vintage Navy fighter planes winged from the anchor stock while "Old Ironsides" majestically sailed under full canvas atop the ring.

You don't believe all this.

Take another look at our front cover where the Camp Pendleton Navy Day Cake for 1973 is pictured. 🍷

TOLL FREE RECRUITING PHONE

Interested friends and relatives seeking information about joining the Navy, and about its educational programs, may telephone toll-free from anywhere in the continental U.S. — Call 800-841-8000. This phone is manned 24 hours/day, 7 days/week. 🍷

THE GASTROENTEROLOGISTS' CORNER

Gastrointestinal Hormones Revisited

By CAPT Frank P. Brooks, MC, USNR

and

CAPT Donald O. Castell, MC, USN†

Since the last published review of gastrointestinal hormones in this journal (*U.S. Navy Medicine* 56[6]: 30-33, Dec 1970), new information and concepts have been emerging at a rapid rate. We wish to consider 5 major developments: (1) newly discovered peptide hormones, (2) the multiple molecular species of gastrin present in vivo, (3) the interpretation of immunoassays, (4) the "physiological" role of gut hormones, and (5) the clinical significance of these hormones. Figure 1 schematically illustrates the multiple peptide hormones currently believed to be secreted by cells situated in the mucosa of the gastrointestinal tract, and the probable site of their greatest concentration. It is obvious that we can no longer restrict our thinking to the originally recognized trio of gastrin, secretin, and cholecystokinin (CCK-PZ).

Three new biologically active peptides have been recently isolated and their amino acid sequence determined. *Vasoactive intestinal peptide* (VIP) has been prepared from crude intestinal mucosal extracts. This compound contains 28 amino acids, nine of which occur in the same sequence as in secretin. This hormone

has marked vasodilator properties, and is also a potent stimulant to intestinal secretion of water and electrolyte. An immunoassay has been developed, and applied to experimental and clinical studies. *Gastric inhibitory peptide* (GIP) has been prepared from porcine intestinal mucosa. It contains 43 amino acids, sharing 9 of these in common with secretin. It is a potent inhibitor of acid secretion in animals, and at present is the leading candidate for the long sought intestinal inhibitor of gastric secretion, an "enterogastrone."

A 22 amino acid peptide has been isolated which stimulates contractions of the body of the stomach in

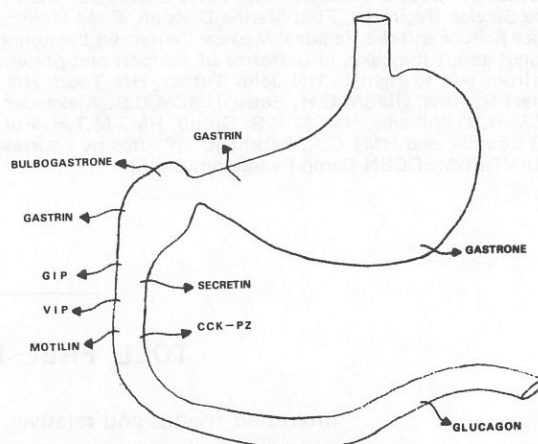


Figure 1.—GASTROINTESTINAL HORMONES.—Schematic representation of the presently recognized GI hormones, and their proposed sites of production.

From the Gastroenterology Division, Internal Medicine Service, Naval Regional Medical Center (NRMC), Philadelphia, Pa.

†Chief, Gastroenterology Division and Chief, Clinical Investigation Service, NRMC Philadelphia, Pa.

The opinions or assertions expressed herein are those of the authors and are not to be construed as official, or reflecting the views of the Department of the Navy or the naval service at large.

animals, without increasing gastric acid output. This hormone, isolated from intestinal mucosa and called *motilin*, has an amino acid sequence which does not show any striking resemblance to that of secretin. In addition, other active extracts of intestinal mucosa have been partially purified, but their amino acid sequences have not been clarified. *Bulbogastrone*, believed to be confined to the proximal duodenum, inhibits acid secretion in response to a decreased intraduodenal pH, but does not stimulate pancreatic secretion. *Intestinal glucagon* (enteroglucagon) is known to be immunologically distinguishable from pancreatic glucagon, but its structure is unknown. Enteroglucagon has a sustained release following a meal; it occurs in greatest concentration in the distal small bowel, and may account for the release of insulin after intestinal glucose perfusion exceeding that after intravenous administration.

Furthermore, the presence of *gastrone* in gastric mucosa has been proposed. An active inhibitor of gastric-acid secretion, this compound has not been purified to date.

With the availability of a sensitive radioimmunoassay for gastrin, it became possible to correlate immunologic reactivity with methods of separating proteins. In the sera of patients with the Zollinger-Ellison syndrome, at least 4 different molecular species of gastrin have been identified: *minigastrin*, a 13-amino acid, N-terminal fragment of gastrin with no biologic activity; 17-amino acid *heptadecapeptide gastrin*, probably the major active fraction; "*big gastrin*," a 34-amino acid peptide with less biologic potency but a longer metabolic half-life in vivo than gastrin; and "*big, big gastrin*," a molecular complex with unknown structure and potency, migrating near albumin. The radioimmunoassays in common use probably detect all of the forms of gastrin. It is possible, however, that separation into individual gastrins will produce important physiologic and clinical information in the future.

A major problem faced by gut endocrinologists is the precise physiological role of gastrointestinal (GI) hormones. For example, what is the role of gastrin in the control of the lower-esophageal sphincter (LES)? Initial experiments with single intravenous injections of exogenous gastrin, and in vitro experiments with smooth muscle have suggested that gastrin is the major determinant of LES pressure. Subsequent studies with endogenously released gastrin and serum-gastrin measurements indicate that the relationship between gastrin and LES pressure is more complex. Indeed, until it is possible to integrate nervous activity with the levels of all GI hormones acting on a tissue, it may be impossible to assay the physiologic role of individual hormones.

A number of observations on gut endocrinology have clinical significance. Gastrin is implicated in the pathophysiology of duodenal ulcer in several ways. Fasting serum-gastrin levels are within normal limits in patients with ulcers, and hence inappropriately high for the levels of hydrogen ion concentration in the gastric antrum. This suggests an abnormality in the release of gastrin. Gastrin levels in the serum of peptic ulcer patients after a meal are higher than those of normal subjects, also pointing to excessive release of gastrin. The dose response of gastric-acid secretion to pentagastrin, in patients with duodenal ulcer, reveals a lower threshold of stimulation and a smaller dose required to attain one half the maximal acid output than is demonstrated in normal subjects. On the other hand, the higher fasting levels of serum gastrin after vagotomy, alone or with a drainage procedure, in spite of decreased acid secretion illustrate the primacy of antral pH in controlling acid secretion, and the disassociation between serum gastrin and gastric-acid secretion.

In patients with gastrinoma of the Zollinger-Ellison (ZE) syndrome, serum-gastrin levels are usually markedly elevated and are therefore diagnostic. However, it has become evident that some patients present fasting serum-gastrin levels in the "grey zone" (200-400 picogram/milliliter). Included among such patients are those with primary hyperparathyroidism. Two procedures of possible diagnostic value are intravenous calcium infusion, and secretin injection. Both maneuvers usually provoke a marked rise in serum-gastrin levels in patients with the ZE syndrome, while ulcer patients demonstrate only a modest rise with calcium infusion, and a decrease in gastrin with secretin. On the other hand, patients with gastrinomas present little rise in serum gastrin after a meal, while patients with peptic ulcer show a significant rise. (See Table I)

TABLE I SERUM GASTRIN RESPONSE TO STIMULATION		
Stimulus	Peptic Ulcer Disease	Zollinger-Ellison Syndrome
Meal ingestion	Marked increase	No change or slight increase
Calcium infusion	Slight increase	Marked increase
Secretin injection	Decrease	Increase

Three problem areas remain: the patient with islet-cell hyperplasia, patients with familial multiple endocrine adenomatosis (FMEA), and patients with suspected antral gastrin-cell ("G-cell") hyperplasia. No comparison

of serum-gastrin studies performed in a large number of islet-cell-hyperplasia patients and gastrinoma patients has been published. In a recent study of 46 members of kindreds with FMEA, about one third had hypergastrinemia (> 200 picogram/milliliter [pg/ml]), and 6 had gastrinomas and peptic ulcer disease. Interestingly, the mean fasting serum-gastrin levels in the latter were only 489 ± 124 pg/ml, compared to 1210 ± 166 in 9 patients with gastrinomas unrelated to FMEA.

The syndrome of "G-cell" hyperplasia has been slow to gain clinical recognition because of the technical difficulties encountered in making quantitative "G-cell" counts, and excluding the diagnosis of gastrinoma. The stakes are high since appropriate therapy ranges from total gastrectomy to parathyroid adenomectomy, or antrectomy, depending upon the correct diagnosis.

There is little new to add to the clinical significance of CCK-PZ. Preliminary results of a radioimmunoassay of somewhat uncertain specificity have produced some surprises, including elevated levels demonstrated in celiac sprue and pancreatic insufficiency, but these observations must await confirmation. Secretin continues to be the basis for the most sensitive evaluation of exocrine pancreatic function, but the advantage of maximal over submaximal stimulation remains uncertain. A recent abstract reporting recovery of pure pancreatic juice, by transduodenal cannulation of the pancreatic duct during secretin stimulation, would appear to hold great promise for future studies. An immunoassay for secretin is now under trial in at least three laboratories in this country. Preliminary data on the use of secretin to relieve the pain of duodenal ulcer have not been encouraging.



TOAST TO CAPT BROOKS.—Members of the Gastroenterology Division, NRMIC Philadelphia extend a warm wish for smooth sailing to CAPT Brooks on the occasion of his retirement from the U.S. Naval Reserve. Participating in the informal ceremony are, from left to right: CAPT D.O. Castell, MC, USN; CAPT F.P. Brooks, MC, USNR; CAPT A.R. Chappelka, Jr., MC, USN; LCDR L.E. Wright, MC, USN; LCDR (now CDR) J.B. Hollis, MC, USN; and LCDR G.L. Eastwood, MC, USNR.

Some patients with the syndrome of watery diarrhea, hypokalemia, and pancreatic islet-cell tumor (so-called "pancreatic cholera"), apparently have high levels of immunoreactive VIP. This may account for the achlorhydria and excessive electrolyte loss, resulting from intestinal hypersecretion which is also seen in this syndrome. Patients with cirrhosis of the liver have also been found to have elevated VIP levels, which might account for the peripheral vasodilatation associated with cirrhosis, since VIP is metabolized in the liver.

Gastrointestinal endocrinology is indeed a young and blossoming field, and we have yet but scratched the surface. The combined impact of the needs for physiologic data, and for understanding of the pathophysiology of the affected organs would seem to portend a bright future for gut endocrinologists.

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EDITORIAL COMMENT ON DR. BROOKS' RETIREMENT

In this issue of *U.S. Navy Medicine*, the article titled "Gastrointestinal Hormones Revisited" represents another valuable contribution by CAPT Frank P. Brooks, MC, USNR, to Navy medicine in general and Navy gastroenterology in particular. It is fitting that we acknowledge the contributions made by this physician over the years, since 30 June 1974 marked the termination of his long career as a Reserve medical officer.

Highly respected in the academic community for his expertise in gastroenterology and gastrointestinal

physiology, Dr. Brooks has remained a loyal supporter of Navy medicine over many years. It was Dr. Brooks who almost single handedly maintained, supported, and stimulated the growth of the gastroenterology training program at Naval Hospital Philadelphia in the late 1960s, when CAPT Orville Nielsen, MC, USN (now retired) was called to a new assignment.

The guidance and direction of Dr. Brooks over the years, in helping Navy gastroenterologists to formulate their training programs and research efforts, have been exceptional. In recent years, CAPT Brooks has often spent two weeks on active duty at the Naval Hospital Philadelphia, and has consistently contributed to patient care, teaching and research. In each of these active

duty periods of "training," he has helped to expand the total scope of the training and research activities in gastroenterology at this hospital.

Those of us involved in Navy gastroenterology are indeed saddened by the retirement of CAPT Brooks, knowing that we have lost a true friend, a faithful supporter, and an exceptional academician. It is fitting that we take this opportunity to express our appreciation for his many contributions, and to observe that he will be sorely missed.

CAPT Donald O. Castell, MC, USN

Contributing Editor in Gastroenterology

DOCS OF DIXIELAND

In order to celebrate their tenth anniversary in show business the "Docs of Dixieland," a musical group made up of military and civilian doctors, cut their fifth record entitled "Dance With the Docs." The recording was made at the Officer's Club, National Naval Medical Center (NNMC), Bethesda, Md., where the band frequently performs.

Claiming to be the oldest permanently established, floating Dixieland band in the nation's capital, the Docs of Dixieland play for military, charitable, and social organizations in the D.C. area.

During its 10-year history, the band has included one Navy admiral and 11 Navy captains among its members. — PAO, NNMC, Bethesda, Md.



AND THE BAND PLAYS ON.—RADM George D. Selfridge, DC, USN (left), CO, Naval Graduate Dental School, Bethesda, Md., is pleased to receive their new album from Dixieland band members CAPT Dorsey J. Moore, DC, USN (center), and CAPT William K. Bottomley, DC, USN (right). (Photo by R.M. Oswald)

FREEDOMS FOUNDATION

SETS '74 CONTEST

"Human Goals: The Advancement of Human Dignity" is the theme for the 1974 Freedoms Foundation letter-writing contest.

Open to all active Service members, Reservists, Guardsmen, ROTC and JROTC cadets, the contest is sponsored by the Valley Forge Patriots Awards program, an activity of Freedoms Foundation, Valley Forge, Pa. It is a nonsectarian, nonprofit and non-political organization dedicated to furthering the cause of freedom and man's God-given dignity.

Entries in the letter-writing contest need not be "letters" as such, but may be in essay or poetry form, not under 100 and not exceeding 500 words.

Two top winners will receive \$1,000 each and one top winner, \$500. There will also be awards of \$100 and \$50, and George Washington Honor Medals and honor certificates. Top award winners will be invited to Valley Forge for the annual presentation ceremony.

Entries must be submitted before 1 Nov 1974 to Freedoms Foundation, Valley Forge, Pa. 19481. Entrants should include full name, Social Security number, military address, Service component, and complete permanent home address including zip code.

Other categories of this contest, including editorials, cartoons, essays, public addresses or sermons relating to the theme, are open to civilians as well as military participants.

Additional information may be obtained from Freedoms Foundation at the address given above. — AFPS, No. 1662, 30 June 1974.

REVIEW OF FLAG OFFICERS' RECORDS

The Chief of Naval Personnel has requested that all records of flag officers referred to the PEB be submitted via BUMED and BUPERS for review. Cases of all flag officers found unfit for duty by the Office of Naval Disability Evaluation (ONDE) are submitted to the Assistant Secretary of Defense (ASD) (H&E) for review. When ASD (H&E) does not concur in the recommendations, the Surgeon General and Chief of Naval Personnel may be consulted.

COMMAND SELECTION BOARDS

New to the Navy Medical Department is a system of formal boards to recommend personnel qualified for command responsibility as COs, directors of clinical services, and officers-in-charge of branch dispensaries. Boards will be convened annually . . . will report their recommendations to the SG . . . reports to be arranged alphabetically by corps, indicating types of billet for which each selectee is considered best fitted.

The FY-75 boards convene in Nov 1974 . . . one for DC officers; one for MC, NC, and MSC CAPTs; one for all remaining officers below the rank of CAPT.

Involved year groups (YGs) are: MC CAPTs through YG-51; DC CAPTs through YG-52; all NC CAPTs in '46 and subsequent YGs and all NC CDRs through YG-60; all MSC CAPTs and CDRs, all MSC LCDRs YG-59 through 66, and all MSC LTs in YG-66 through '69.

Failure to submit written notification that you decline consideration for command opportunity is construed as a positive desire for board consideration and, if selected, willingness to accept orders to an appropriate command/staff assignment.

Look for this system to insure selection of the "best fitted" officers to fill vital management billets, and to relieve the MC of some administrative burdens by selection of qualified nonmedical officers for certain management roles.

NEW DEPUTY TO DR. COWAN

Replacing MGEN George J. Hayes who has retired, is veteran DOD health staffer, Vernon McKenzie. New post for McKenzie is that of principal deputy to Dr. James R. Cowan, assistant secretary of defense (ASD) for health and environment (H&E).

NEW UNSECNAV

Nomination of David S. Potter, Ph.D., for position of Under Secretary of the Navy has been approved by the Senate. (See U.S. NAVMED 64[3]:45-46, Sep 1974.)

VIP STATUS

Implementing directive for variable incentive pay (VIP), Public Law 93-274 was signed by the President on 5 Sep . . . The DOD Directive 1340.11 (VIP for MC officers) was signed by SECDEF on 12 Sep 1974. There will be one effective date on contracts for all eligible MC officers — 5 Sep 1974. (See "Notes and Announcements")

OTHER PAY LEGISLATION

H.R. 15936 providing for continuation pay (COPAY) for physicians in the uniformed services who are in their initial residency (P. S15169) was passed by the Senate and cleared for the White House.

P. H8348 legislation to exclude from gross income funds received under the armed forces health professions scholarship program is under consideration by conference at the request of the Senate to resolve House disagreement with Senate amendments to H.R. 12035 (Cellulose Salts [Health Professions Scholarship]).

FY-75 MILCON PROGRAM

OSD (H&E) will now handle all major projects of military construction (MILCON) programs.

FY-75 MILCON Program final markup now received from House and Senate Authorization Committees . . . Ten construction projects tentatively dropped Project appeal restrictions due to dollar limitations created by add-ons, such as \$15 million for the Uniformed Services University of the Health Sciences (USUHS) at Bethesda, and \$14.8 million for NAVCOMMSTA Diego Garcia Markups by the Appropriations Committees will soon be reported. Continued program erosion by these committees is anticipated.

DENTAL REGIONALIZATION

Regionalization of naval dental facilities approved in concept for extension to 17 additional regions . . . Phase II incorporates all 17 regions, with 8 of these being structured on BUMED-managed activities, and 9 without command structure present Phase III will bring all dental regions under BUMED sponsorship.

OR COURSE FOR NURSES

Short course for NC officers interested in operating-room (OR) billets will be offered at NAV HOSPs Camp Pendleton, Calif., and Charleston, S.C. Six-week courses will be conducted in a nonservice atmosphere, and should help to relieve shortages in staffing levels of OR nurses.

PORTABLE DENTAL EQUIPMENT

A 150-pound, entirely self-contained Mini-op is being evaluated by the Preventive Dentistry Dept., at the Naval Graduate Dental School, Bethesda.

Requiring only connection to a 110-volt electrical outlet, the truly portable system offers the following features:

- 1) Fiber-optic operating light
- 2) Air-vacuum system with collection tank
- 3) Air/water syringe with ½-gallon water tank
- 4) High- and low-speed dental handpieces
- 5) Adjustable operating tray, and
- 6) Water & electrical outlets for auxiliary equipment.

HAPPY NAVY BIRTHDAY . . . 13 Oct 1974 . . . A Proud Tradition 

SCHOLARS' SCUTTLEBUTT



A frequent subject of inquiry by many of our scholarship students is the available educational lattice — the training opportunities and pathways open to them, following graduation and entry onto active duty in the Navy Medical Corps. This topic assumes particular importance as we now enter an era during which an expanded period of graduate medical education (GME) is rapidly becoming a prerequisite for unsupervised practice, hospital privileges, and licensure.

PL 92-426 (1975 PROGRAM)

Since the largest number of Navy-sponsored students are subsidized under the provisions of *PL 92-426 (1975 program)*, the educational pathway which is available following participation in this program will be addressed first. Under the provisions of this subsidy law, upon completion of medical school a student must apply to the Navy for the first year of GME (G-1 level) and, if selected, must serve.

Available to the subsidized student are approximately 220 positions allied with approved Navy residency programs at the first, or Graduate Year-one (G-1) level. In accordance with the requirements of the Council on Medical Education of the American Medical Association, residency training programs in the specialties of family practice, pathology, psychiatry, pediatrics, and obstetrics & gynecology will be offered by the Navy

as a full continuum. Dependent, of course, upon the continuance of satisfactory performance, an applicant selected for the G-1 level of one of these programs will be provided a full progression in training, leading to board eligibility. The successful applicant who is allied with one of the remaining clinical specialties, either in a categorical, categorical-diversified, or flexible G-1-level position, must reapply for a continuation of training in the specialty of his choice.

If, upon completion of the first year of GME, a subsidy participant is either undecided upon a choice of further clinical training or is unsuccessful in obtaining further training in the specialty of his choice at that time, what other options are available? In the event that an unsuccessful applicant still desires further clinical specialty training at that time, inquiry should be made to the Bureau of Medicine and Surgery as to the availability of GME positions in other specialties. Frequently positions are, or become available in specialties which will satisfy the applicant's career objectives.

If an alternate pathway is not attractive, or if further clinical specialty training is not desired upon completion of the G-1 level, many outstanding career patterns remain for the interested officer. Operational medicine offers exciting challenges, both in training and in practice. Training in aerospace medicine, submarine medicine, or amphibious field medicine offers the opportunity to gain a wealth of experience and a background of unlimited potential. Full training programs are offered in these areas and can lead, if desired, to board certification and advanced graduate degrees. Sometimes the operational-medicine specialist may choose to reapply for a continuation of clinical specialty training at a later time in his career. In addition to operational medicine, the Navy has a need for fully trained physicians in the fields of occupational and preventive medicine. The Navy also offers an opportunity to acquire advanced training in occupational medicine and public health, for interested and successful applicants who are so inclined. Similarly, ship-board duty in a variety of stimulating fleet assignments can serve a worthwhile professional objective, prior to reentry into the continuum of clinical training.

The unsuccessful applicant for first-year GME in the Navy has many options and alternative pathways to pursue. Failing selection, a subsidy-program candidate will be so notified in order that he (or she) may seek reentry into the matching system offered by the National Intern-Resident Matching Program (NIRMP). Application can be made to the Navy for a deferment, in order to obtain a full continuum of clinical training in a civilian hospital. It is currently anticipated that up to 80% of the candidates who are not selected for

Names of medical education assistant directors at various naval hospitals are provided below as contacts for further information concerning the program at their respective hospitals:

LOCATION	TELEPHONE	CONTACT
*NRMCM Charleston, S.C.	(803) 743-5670	LCDR R. Higgins, MC, USN
*NRMCM Camp Pendleton, Ca.	(714) 725-3310	CDR J.W. Norton, MC, USN
*NRMCM Jacksonville, Fl.	(904) 722-2201	LCDR J.C. Baggett, Jr., MC, USNR
*NH Pensacola, Fl.	(904) 452-4411	LCDR J.L. Wilson, MC, USN
NRMCM Portsmouth, Va.	(804) 397-6541	CAPT J.P. Collier, MC, USN
NRMCM San Diego, Ca.	(714) 233-2022	CAPT C.R. Sargent, MC, USN
NRMCM Oakland, Ca.	(415) 639-0111	CDR V.L. Goller, MC, USN
NNMCM Bethesda, Md.	(202) 295-0274	CAPT R.J. Van Houten, MC, USN
NRMCM Philadelphia, Pa.	(215) 755-8232	CDR J.F. McGrail, MC, USN

Contacts at the Bureau of Medicine and Surgery, Washington, D.C. are:

Mr. C.B. Mohler	(202) 254-4339
CAPT W.M. McDermott, Jr., MC, USN	(202) 254-4280
CAPT S. Barchet, MC, USN	(202) 254-4279

*Family Practice programs only.

Figure 1.—Helpful Contacts for Information on Medical Education (Updated)

Navy programs, will be deferred for training in those specialties which are compatible with the projected needs of the Navy Medical Department. Should their request for a full continuum deferment be disapproved, prior to completion of the first year of civilian GME such applicants may: reapply for Navy GME programs, apply for operational medicine training, or select assignment according to requirements.

THE MOSP AND SMSP


Much the same training pathway exists for students being subsidized under the 1965 (MOSP)* and 1915 (SMSP)** active-duty programs. These subsidized active-duty officers are not required to apply for first-year GME (G-1) in Navy programs, but historically

*MOSP = Medical and Osteopathic Student Scholarship Program

**SMSP = Senior Medical Student Program

over 90% have applied for, and accepted Navy programs. However, upon completion of the first year of GME (if served in a civilian hospital), such officers must apply for clinical or operational training, or they may elect to defer further training at this time and serve in the fleet, or as a member of a Naval Regional Medical Center staff, with further clinical training as a subsequent goal.

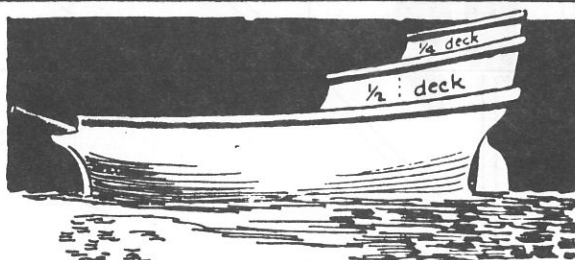
The most important thing to remember is that no matter what professional objectives you may be seeking, we are interested. You represent a resource which we need in Navy medicine. We want to balance, as closely as possible, your desires with our requirements. Let us plan your options with you. If you have questions or uncertainties, ask us. We will try to help.

As in earlier columns of Scholars' Scuttlebutt, we are again publishing the names and phone numbers of the Bureau and hospital representatives whom you may contact. (See Figure 1) 

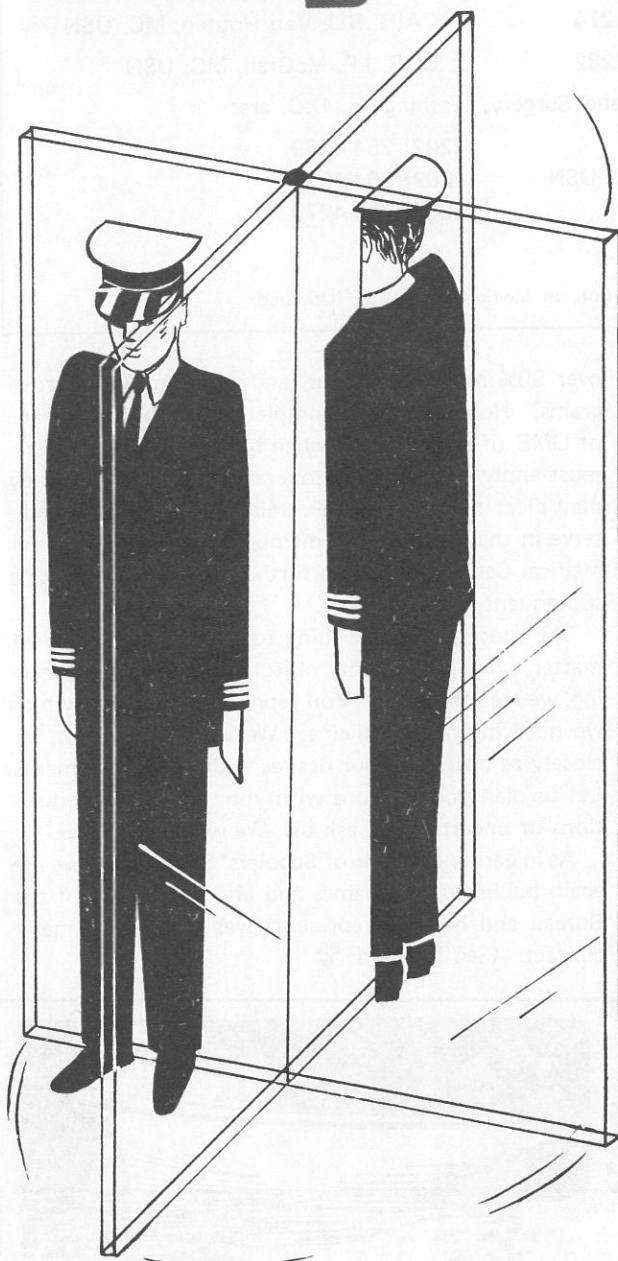
• QUARTER-DECK •

The quarter-deck received its name in the days when decks were in tiers. The "Half-deck" was half the length of the ship, and the "Quarter-deck" was half the length of the half-deck.

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Coming and Going



RADM C.L. WAITE, MC, USN

From: Assistant Chief for Operational Support,
BUMED Code 8

To: Assistant Chief for Operational Medical
Support, BUMED Code 5 (Jul)

CAPT S.G. KRAMER, MC, USN

From: CO, Nav Hosp Boston, Chelsea, Mass.

To: CO, Nav Hosp Philadelphia, Pa. (May)

RADM V.L. ANDERSON, DC, USN

From: Director/CO, Naval Regional Dental Center,
Norfolk, Va.

To: Retirement (Jun)

RADM G.A. BESBEKOS, DC, USN

From: CO, Naval Dental Clinic, Charleston, SC

To: Director/CO, Naval Regional Dental Center,
Norfolk, Va. (Jun)

CAPT F.P. BEALL, JR., DC, USN

From: CO, 13th Dental Company

To: Naval Training Center, Orlando, Fla. (Aug)

CAPT R.W. BRUCE, DC, USN

From: XO, Naval Dental Clinic, Pearl Harbor,
Hawaii

To: CO, Naval Dental Clinic, Pearl Harbor,
Hawaii (May)

CAPT J.G. CHUDZINSKI, DC, USN

From: CO, Naval Dental Clinic, Long Beach, Calif.

To: CO, 13th Dental Company (Jun)

CAPT C.A. DELAURENTIS, DC, USN

From: Director/CO, Naval Regional Dental Center,
Great Lakes, Ill.

To: Naval Dental Center, San Diego, Calif. (Aug)

CAPT N.C. DEMAREE, DC, USN

From: XO, Naval Dental Clinic, Charleston, SC

To: CO, Naval Dental Clinic, Charleston, SC
(Jun)

CAPT J.D. ENOCH, DC, USN

From: Deputy Director/CO, Naval Regional Dental
Center, Great Lakes, Ill.

To: Director/CO, Naval Regional Dental Center,
Great Lakes, Ill. (Aug)

CAPT J.R. EVANS, DC, USN

From: CO, Naval Dental Clinic, Newport, RI

To: Retirement (Jun)

CAPT W.G. HILLIS, DC, USN

From: CO, Naval Dental Clinic, Pearl Harbor, Hawaii
To: CO, Naval Dental Clinic, Long Beach, Calif.
(Jun)

CAPT J.P. MC GONNELL, JR., DC, USN

From: CO, Naval Dental Clinic, Philadelphia, Pa.
To: Retirement (Jun)

CAPT C.J. MC LEOD, DC, USN

From: Nav Hosp Oakland, Calif.
To: Deputy Director/CO, Naval Regional Dental
Center, Great Lakes, Ill. (Sep)

CAPT W.H. MC NITT, DC, USN

From: Boston Naval Shipyard
To: CO, Naval Dental Clinic, Newport, RI (Jun)

CAPT S.W. PERAND, DC, USN

From: XO, Naval Dental Clinic, Guantanamo Bay,
Cuba
To: CO, Naval Dental Clinic, Guantanamo Bay,
Cuba (Jul)

CAPT J.H. SCRIBNER, DC, USN

From: Nav Hosp Pensacola, Fla.
To: CO, Naval Dental Clinic, Philadelphia, Pa.
(Jun)

CAPT W.G. WOODY, DC, USN

From: CO, Naval Dental Clinic, Guantanamo Bay,
Cuba
To: Marine Corps Recruiting Depot, Parris Island,
SC (Jul) 🇺🇸

THE PASSING OF NAV HOSP QUONSET POINT



CLOSING DOWN.—Naval Hospital Quonset Point, R.I., was decommissioned on 28 Jun 1974. At ceremonies marking the occasion, CAPT N. Raffaelly, MC, USN (center left), hospital CO, passed a symbolic key to Mr. R. Lafouche (center right), shore establishment realignment representative. Also attending the ceremony were (left to right): LCDR O. Cunningham, MSC, USN, administrative officer; ENS W. Moran, MSC, USN, personnel officer; CDR T. McCann, chief of dental service; and LT H. Pheeneey, MSC, USN, aviation physiologist. — PAO, Nav Hosp Quonset Point, R.I. 🇺🇸

The Cervicocranium and the Aviator's Protective Helmet

By CDR E.J. Colangelo, MC, USN
Naval Safety Center
Norfolk, Virginia 23511

An analogy based on the similarities of the hospital transport (APH-6) aviator's protective helmet and the hangman's noose points up some interesting relationships to aircraft-accident investigation, and to the associated traumatic pathology.

THE HANGMAN'S-NOOSE ANALOGY

The inferior edge of the helmet, when visualized as part of the continuous circle completed by the nape strap and the chin strap, forms a loop that can be likened to a hangman's noose. The analogy might be further extended to include the lesions made about the neck by the straps or the edge of the helmet, paralleling the abrasions and contusions that might be associated with a rope having encircled the same structures. When the knot is situated at the side of the head (subaural), such a hangman's noose produces fractures of the base of the skull, tending to extend bitemporally through the basisphenoid.¹ When the knot is situated anteriorly and beneath the chin (submental), the hangman's noose causes a fracture dislocation at the axis. Characteristically the posterior arch is fractured and, interestingly enough, the odontoid process is not involved. Many of us had anticipated that a fractured, displaced odontoid process would represent the prototype lesion which so precariously endangers the patient with cervical cord compromise and death, similar to the hangman's fracture. More recent assessments of odontoid fracture mortality, however, suggest an incidence of less than ten percent.²

A CASE REPORT

One interesting and compelling aircraft accident investigated by the Naval Safety Center, Norfolk, Va., served to emphasize the practical application of this theoretical exercise. A Navy A-4 jet aircraft experienced difficulties in flight which caused the pilot to eject at an altitude, attitude, and air speed that were within the operating envelope of the ejection seat. Supported by a fully blossomed functioning parachute, however, the pilot reached the ground severely injured and died shortly after the accident, as a result of a transverse laceration of the cervical spinal cord.

The details of the investigation (omitted here for the sake of brevity) established that the energy responsible for the fatal lesion was transmitted through the helmet and its inferior edge, into the posterolateral neck. A vertebral dislocation of C-2 on C-3 resulted, which in turn severed the spinal cord. The essential mechanism of injury involved the application of blunt force to one side of the helmet, causing it to rotate about the pilot's head in such a way that the opposite side of the helmet was forced inferiorly and medially, into the adjacent neck region. Similar observations had prompted an earlier modification of the helmet, to incorporate a thicker protective edge roll. The actual helmet involved in this case is pictured in Figure 1. Note that the damage to the helmet is slight, and hardly commensurate with the significance or severity of the associated injury. It is often tacitly assumed, when a helmet which has been subjected to large impact forces exhibits only

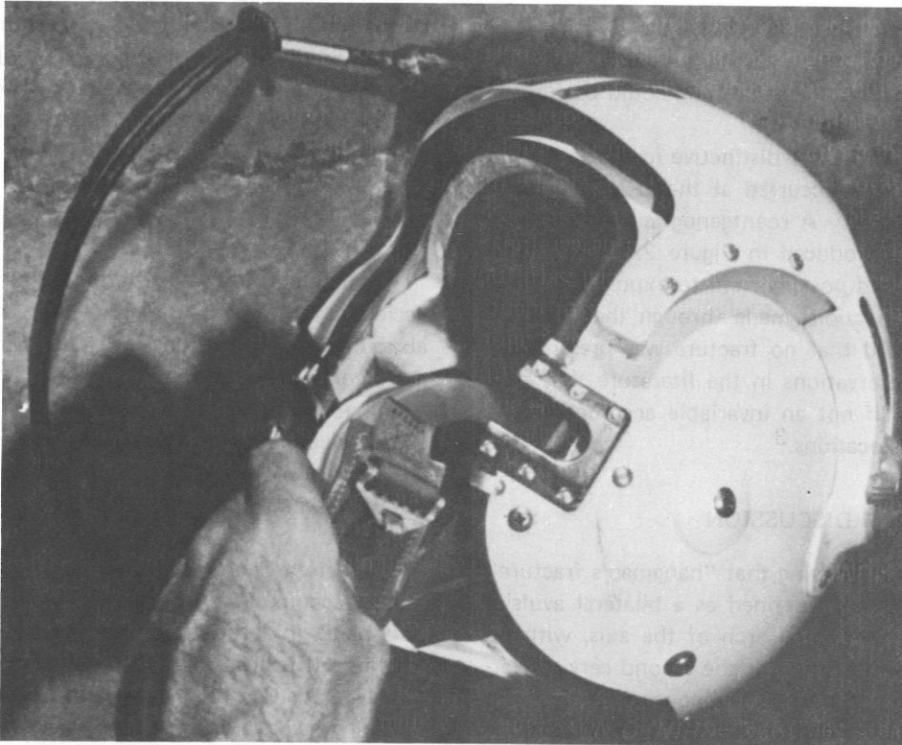


Figure 1.—The helmet involved in the production of the cervical dislocation pictured radiologically in Figure 2.

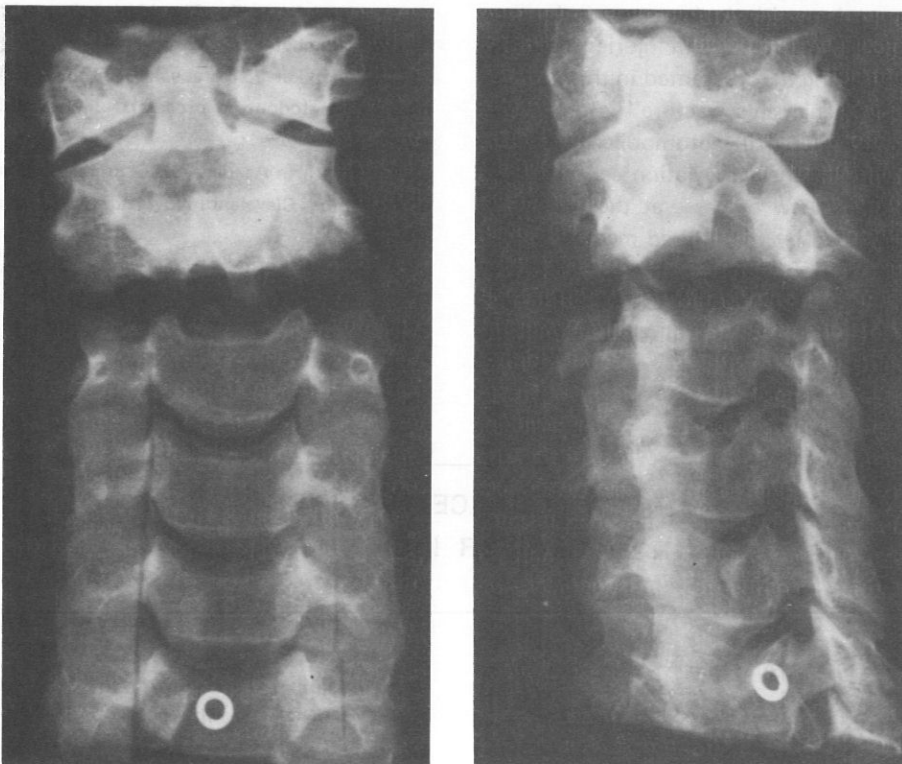


Figure 2.—Roentgenographic views of the autopsy specimen demonstrate the vertebral dislocation at C2-C3. Note that no evidence of fracture is present.

slight damage, that the head which it is designed to protect should remain proportionally secure. This unfortunate case illustrates that nothing could be further from the truth.

The pathology itself was distinctive in that a dislocation without fracture occurred at the C-2/C-3 level of the cervical vertebrae. A roentgenographic study of the specimen is reproduced in Figure 2. A laminectomy was performed post mortem to expose the spinal cord. Histologic sections made through the C-2/C-3 vertebrae confirmed that no fracture was present, despite common observations in the literature that fracture is the usual, if not an invariable accompaniment of such severe dislocations.³

DISCUSSION

It is especially interesting that "hangman's fracture" has been fairly recently defined as a bilateral avulsion fracture through the neural arch of the axis, with or without fracture dislocation of the second cervical vertebral body upon the third.⁴ The concept of the "cervicocranium" as an entity constituted by the cranium, the atlas, and the axis suggests that this functional segment above C-3 tends to move as a single unit, in dislocation as well as in flexion, extension, and rotation. The implied mechanical weakness at C-3, or the junction of the cervicocranium with the lower cervical spine makes it a likely site for dislocations in injuries sustained by mechanisms resembling that presented in this particular accident. The "hangman's fracture" is probably most frequently encountered in automobile-accident victims. What is its frequency in aviation accidents?

Unfortunately, the review of cases at the Naval Safety Center is impeded by the limited medical observations reported in cases of this sort. It is distinctly rare to receive an autopsy protocol describing the dissection of the cervical spine, with full documentation

of the nature and extent of such lesions. Yet that information is greatly needed, to develop an accurate understanding of the pathogenesis of this lesion, as well as a sound basis for recommendations on the design of protective headgear.

CONCLUSION

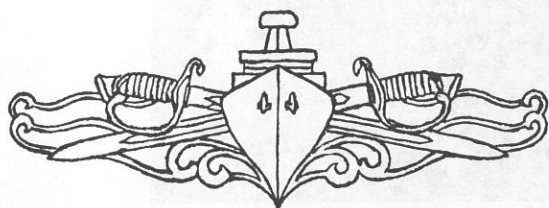
When you study and interpret your next aircraft accident, why not consider whether any of the linear abrasions and contusions about the victim's neck exactly correspond to part of the helmet and, if so, determine whether there is an associated lesion involving the cervicocranium. The simple procedure of fitting the helmet to the head, at autopsy, can define interesting relationships in reconstructing the mechanism of injury.

The Safety Center is most anxious to relate such findings to accumulated information stored in the existing data bank, in an attempt to better define the role of this lesion in aviation safety. Telephone us at the Naval Safety Center for any help we can offer in this, or any other related problems. (Autovon: 690-7926. Commercial: [804] 444-7926.)

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4. Schneider RC, Livingston KE, Cave AJE and Hamilton G: "Hangman's Fracture" of the cervical spine. *J Neurosurg* 22(2), Feb 1965. ☞

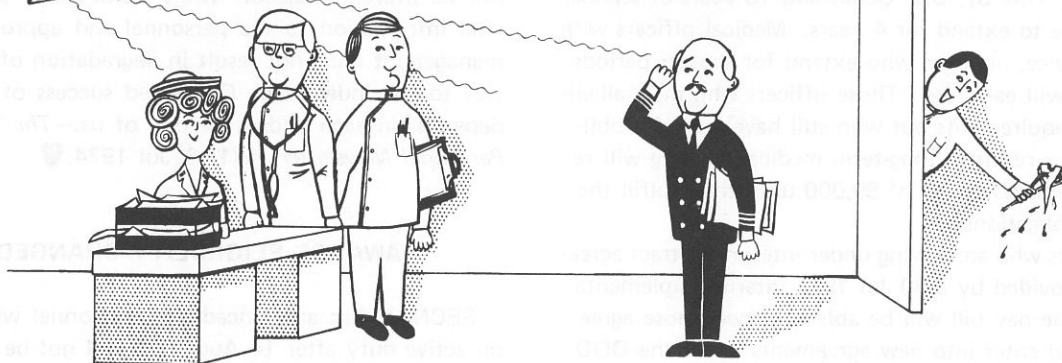
NEW SURFACE WARFARE OFFICER INSIGNIA



NEW INSIGNIA.—This new insignia has been approved for wear by surface warfare officers.

Recently, the Chief of Naval Operations approved a design for a Surface Warfare Officer Insignia to be worn by all officers who qualify for the Surface Warfare Officer designation. The gold insignia depicts the bow view of a surface ship, a bow wave on each side, and crossed swords over the water's surface. — *The Officer Personnel Newsletter* 19(1):16, Jul 1974. ☞

Notes and Announcements



COMMAND SELECTION BOARDS

A significant change has been made in Medical Department policy regarding the selection and assignment of officers for command responsibility at naval medical facilities. For the first time, *all* qualified Medical Department members who have not declined consideration will be given the opportunity for assignment as commanding officers, executive officers, directors of clinical services, administrative officers, or officers-in-charge of branch dispensaries.

In order to conform to accepted policies of the Bureau of Naval Personnel and to select only those "best fitted" to administer naval medical facilities, the Surgeon General has directed that a Command Selection Board, composed of representatives of all Medical Department officer corps, be convened annually to recommend the best qualified personnel for command assignment.

It is anticipated that the first three boards will meet in November to consider officers in the following year groups (YGs):

MEDICAL CORPS — All CAPTs through YG 51.

DENTAL CORPS — All CAPTs through YG 52.

NURSE CORPS — All CAPTs in YG 46 and subsequent YGs
All CDRs through YG 60.


MEDICAL SERVICE CORPS — All CAPTs
All CDRs
LCDRs in YGs 59-66
LTs in YGs 66-69.

One board will screen the records of Dental Corps CAPTs; the second board will screen the records of

Medical Corps, Medical Service Corps, and Nurse Corps CAPTs; and the third board will screen the remaining records.

The officers under consideration this year have received individual letters from their respective Corps, and have been given the opportunity to decline consideration for selection by the Board. Those who decline may be considered in subsequent years if they so desire.

The boards will report to the Surgeon General the type of billet for which each selected individual is considered best fitted. Detailers will then use these lists when recommending individuals for assignment to the specific billets. Selection will be based on qualities of leadership potential, academic excellence, supervisory ability, management expertise, and administrative experience. However, the recommendations of the Command Selection Board do not guarantee assignment to a command position. Keen competition among many well-qualified candidates for a limited number of jobs will significantly limit assignment opportunity.

This system is sound and will help to insure the continued improvement of the Navy health-care-delivery system, by selecting only the best fitted officers to fill vital management billets.—BUMED, Code 3A. 

MEDICAL INCENTIVE PAY APPROVED

Secretary of Defense James R. Schlesinger has signed a DOD Directive authorizing payment of variable incentive pay (VIP) to eligible DOD medical officers. Qualified Navy medical officers below the grade of O-7, who are not serving in intern or residency training but who are serving in a critical specialty, will receive a bonus of up to \$13,500 a year for each year of active duty

they agree to serve after completing initial active duty obligations. The maximum bonus of \$13,500 will be given to physicians with between 4 (as defined in Section 203, Title 37, U.S. Code) and 13 years of service, who agree to extend for 4 years. Medical officers with more service, or those who extend for shorter periods of time, will earn less. Those officers who meet all eligibility requirements but who still have a service obligation as a result of long-term medical training will receive a reduced bonus of \$9,000 until they fulfill their service obligations.

Officers who are serving under interim contract agreements provided by a 30 Jul 1974 interim implementation of the pay bill will be able to cancel those agreements and enter into new agreements under the DOD Directive. Similarly, officers presently serving on continuation pay contracts initiated before 1 Jun 1974, the date the Medical Pay Bill became effective, will be immediately eligible to receive VIP at the new rates by repaying the unearned portion of their continuation pay agreement.

Additional details on the implementation of VIP for medical officers are contained in DOD Directive 1340.11, effective 5 Sep 1974.—*CHINFO Newsgram*, 37-74. ☛

JUMPS IS COMING

Phased implementation of the Joint Uniform Military Pay System (JUMPS) has proceeded to a point where your official leave account is maintained by computer at the Navy Finance Center, Cleveland. The Leave and Earning Statement (LES) which you receive each month currently shows the status of your leave account, allotments, and identification information. Items of identification and service data such as name, Social Security number, pay entry base date, etc., should be carefully verified for correctness.

The next phase of JUMPS, in Oct 1974, will be to commence computation of pay based upon this information. For the transition to automated pay computation to proceed smoothly, accurate data is necessary. Your efforts in correcting any discrepancies on your LES at this time will pay dividends later.

To correct a discrepancy in blocks 1 through 4 or 6 through 10, contact your administrative office and request corrective action in accordance with MAPMIS Manual Part I (Active). If you have dependents and BAQ is not indicated in block 18, insure that your Dependency Application/Record of Emergency Data (NAVPERS 1070/602) is current and correct. Your

disbursing and administrative officers should consult PAYPERSMAN for appropriate correction procedures.

The importance of careful review at this time cannot be overemphasized. While JUMPS will provide vital information to the personnel and appropriation managers, it must not result in degradation of pay service to the individual. Continued success of JUMPS depends on each and every one of us.—*The Officer Personnel Newsletter* 19(1):6, Jul 1974. ☛

AWARDS ELIGIBILITY CHANGED

SECNAV has announced that personnel who came on active duty after 14 Aug 1974 will not be eligible to hold the National Defense Service Medal. Eligibility requirements now state that personnel with "honorable active service as a member of the Armed Forces for any period after 26 Jun 1950 and before 28 Jul 1954, or after 31 Dec 1960 and before 15 Aug 1974" will receive the award.

Another recent change in award eligibility addresses authority to accept foreign awards for service in Vietnam. According to SECNAV, that authority ended as of 28 Mar 1974. In other words, personnel who, after 1 Mar 1961 and before 28 Mar 1974, accepted foreign awards for service in Vietnam had the authority to do so. Anyone receiving a foreign award after that period will have their requests for acceptance processed under the Foreign Decorations Act of 1966. Details on foreign awards for service in Vietnam are contained in SECNAV Instruction 1650.23B, and in Chapter 7 of the Awards Manual.—*CHINFO Newsgram*, 32-74. ☛



Navy physicians will join their civilian colleagues in observing Oct 1974 as *Immunization Action Month*.

One of the many advantages enjoyed by military personnel and their dependents is the availability of free prophylactic immunizations. The administration of certain vaccines is mandatory for active-duty Navy personnel, but dependents are usually exempt from such requirements. Although it would be interesting to compare the status of Navy dependent immunization with that of the civilian community at large, no data base exists for making such an evaluation. It is probable that in our fallibility we, too, have been remiss in assuring the completeness of our patients' immunizations.

During October, individual hospitals and dispensaries should initiate "Immunization Update" programs. Medical Department personnel should review patient records for immunization discrepancies, and may wish to start "word of mouth" campaigns to improve the immune status of the communities they serve. Finally, those of us in the medical department who have a normal tendency to proselytize would do well to take a hard, objective look at our own immunization records, and those of our families.—BUMED, Code 7. ☸

HISTORIC RENAL SURGERY AT NAVREGMEDCEN PHILADELPHIA

The first extracorporeal renal surgery performed in a military hospital was accomplished by a team of urologic surgeons at NAVREGMEDCEN Philadelphia on 22 Jul 1974. Only about 20 such procedures have been performed to date in civilian hospitals in the U.S.

Led by LCDR Richard Milsten, MC, USNR, the surgical team removed a diseased kidney from a patient and repaired four arterial aneurysms while the kidney was outside the patient's body. Immediately following its return to the patient and restoration of the blood supply, the kidney began to function normally. The patient has subsequently done well.

Dr. Milsten, who has been working in the field of extracorporeal renal surgery for 2 years, was assisted in the historic surgery by: CAPT E.C. Sacher, MC, USN; LCDR Samuel Steele, MC, USN; LCDR Robert Doebler, MC, USN; and LCDR Richard Sowden, MC, USN. Two of Dr. Milsten's former teachers from Richmond, Va., — H.M. Lee, M.D. and W.W. Koontz, Jr., M.D., — came to Philadelphia to help with the operation.

CDR Richard Davis, MC, USN and LCDR Scott Wheeler, MC, USNR administered anesthesia during the 8-hour operation. Radiology services were provided by LCDR Richard Levine, MC, USNR and HM2 Warren Clark, USN. Further assistance was provided by urology technicians HM3 Jay Cool, USN and HM3 James McAlea, USN.

The operating room staff supporting the operation included: LCDR Valaine Pack, NC, USN; LT Earma Jean Wells, NC, USN; ENS Yvonne Rolek, NC, USNR; HN Steven Hallam, USN; HM3 James Kent, USN; HN Thomas Sanders, USN; and HN Donnie Wynn, USN. HM2 John Sindoni, USN, helped to prepare the injectable solution required during the operation.

A permanent record of the procedure was made by medical photographer HM2 Roger Creighton, USN.—*Regional Reflections*, NAVREGMEDCEN Philadelphia, Vol IV, No. 2, Aug 1974. ☸

NMRI HYPERBARIC CHAMBERS USED TO TREAT GAS GANGRENE

Medical teams of the National Naval Medical Center (NNMC) and the Naval Medical Research Institute (NMRI), Bethesda, Md., recently collaborated to successfully treat a rare, life-threatening infection in a 17-year-old boy.

The patient had undergone leg surgery in a civilian hospital to halt the spread of cancer. After the operation the patient developed an infection with *Clostridium perfringens*, or "gas gangrene," which carries a mortality rate of 45%.

A prime requisite for treating gas gangrene is high pressure oxygen, since the bacteria are anaerobes and normally thrive in an environment with no oxygen supply. In the Washington, D.C. area, only the Navy possesses the necessary hyperbaric chambers for applying oxygen under three atmospheres of pressure.

Once the diagnosis was determined, the patient's physicians contacted NNMC officials and arrangements were made for the patient's prompt transfer to the Bethesda facility on a humanitarian basis. An NMRI medical chamber team, whose primary function is to conduct research in medical problems related to diving, applied oxygen pressure treatments. During the course of the next 3 days and nights, the patient was carefully shuttled back and forth from the chamber facilities to the operating room, and the intensive care unit at NNMC, Bethesda. Physicians removed necrotic tissue, and nursing teams gave the patient constant care. The patient began to improve with the first oxygen treatment, and has continued to do well.

Since gas gangrene is rarely presented clinically, the chamber facilities needed for treatment of the condition are not available in most areas. Navy doctors are frequently approached on an international scope, for advice on the use of hyperbaric chambers in treating certain illnesses.—PAO, NNMC, Bethesda, Md. ☸

RADM LUKASH NAMED PRESIDENT'S PHYSICIAN

In one of his first appointments, President Ford named RADM William L. Lukash, MC, USN to succeed Air Force MGEN Walter Tkach as physician to the President. Dr. Lukash has served on the White House medical staff since 1967, and has been assistant physician to the President since 1969.

A specialist in internal medicine and gastroenterology, RADM Lukash was also chief of the Gastroenterology



WHITE HOUSE APPOINTEE.—RADM William M. Lukash, MC, USN, former chief of the Gastroenterology Service at NNMC Bethesda, Md., has been named physician to President Gerald R. Ford.

Service at the National Naval Medical Center, Bethesda, Md., while serving as the No. 2 physician at the White House.

The choice is applauded by numerous admirers of Admiral Lukash and Presidential well-wishers. 🍷

NAVAL HOSPITAL BOSTON DEACTIVATED IN CHELSEA

The end of an era in Navy medicine was marked on 28 Jun 1974 when Nav Hosp Boston (also known as Chelsea Naval Hospital) closed its doors after more than 138 years of dedicated service. It was said to have been the oldest U.S. naval hospital in continuous operation.

Amid a stream of reporters and on a sea of faithful friends, this "fine old lady" sailed her last mission. On hand for the occasion were "sideboys" from the USS *Constitution* in uniforms of the 1800s, and the Color Guard from the Boston Marine Barracks accompanied by a Navy corpsman carrying the Navy flag; the North-eastern area Navy Band played one last "Auld Lang Syne" to mark the hospital's passing. There was scarcely a dry eye in Chelsea.

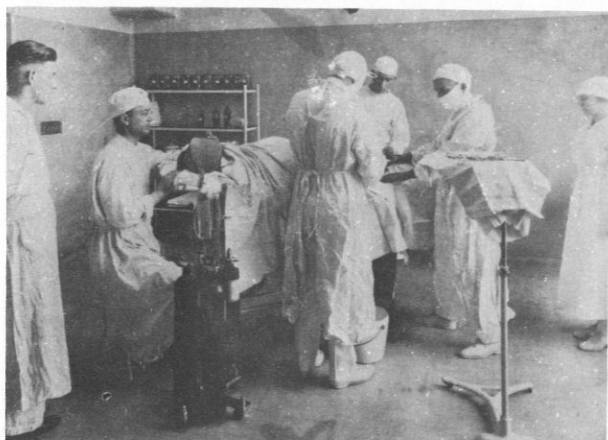
A 200-year history as a place of medical refuge is claimed for the site of Chelsea Naval Hospital. During the Revolutionary War, soldiers of the Continental Army wounded in the Battle of Bunker Hill were brought here from across the Mystic River to be treated. Construction of the original hospital building was completed in Jan 1836 on land purchased from Dr. Aaron Dexter; supplanted by a newer hospital in 1914, the original building eventually became a bachelor officers' quarters, and has now been designated as a national historic site. Also to be preserved as historic landmarks are the USS *Constitution's* powder magazine, built in 1838 and currently used as a warehouse; the Marine Hospital, built in 1857 and now used as bachelor enlisted quarters; and the commanding officer's quarters, built in 1856.

Nav Hosp Boston was the scene of a number of medical "firsts." The American Red Cross first affiliated with a military hospital here in 1918. This was also the first U.S. naval hospital to be fully affiliated with a major medical school, and through the years many health-care professionals, including civilians and members of all the military services, received advanced training in this facility. Postgraduate medical training programs were developed here in many medical specialties, and innovative procedures were developed in orthopedic, plastic, and ophthalmic surgery. The first successful transplant of parathyroid glands that had not been donated by an identical twin was performed here in 1956. For many years, Nav Hosp Boston also sponsored an all-military professional symposium which attracted military physicians, dentists, administrators, and nurses from around the world to share their knowledge.

Most recently, Chelsea Naval Hospital welcomed home four prisoners of war from Vietnam. Assistance



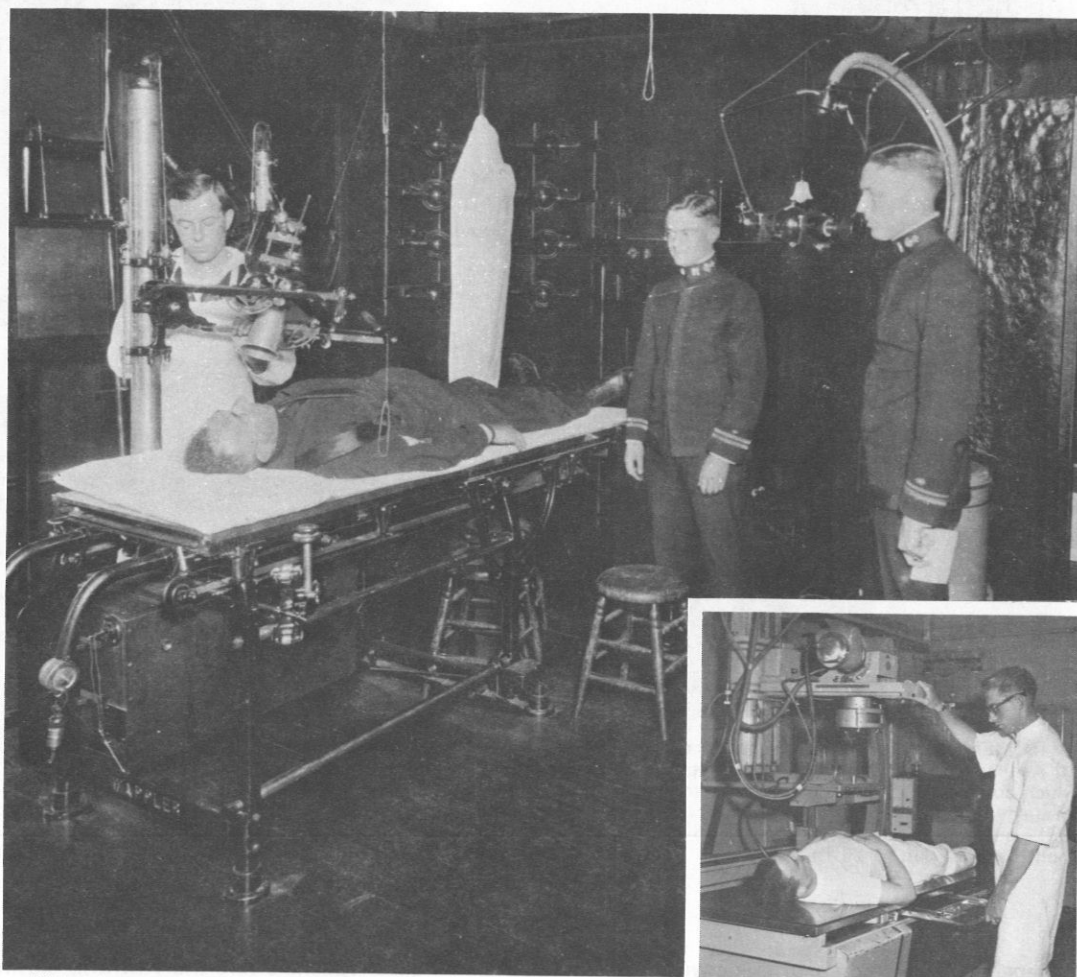
FINE OLD LADY.—Nav Hosp Boston at Chelsea, Mass., was deactivated on 28 Jun 1974 after 138 years of dedicated service.



SURGICAL TEAM.—The trappings change, but the mission remains the same. Here, on 2 Jun 1919, a naval surgical team cares for a patient at Nav Hosp Boston. Similar scenes were oft-repeated in the Chelsea operating room until 1974, when the hospital was deactivated.

was also given the City of Chelsea in fighting one of the most devastating fires in recent history, and high-quality care was provided patients despite a series of bomb threats, fires, and shootings. The able response of the staff to these challenges, as well as the excellence of the planning and execution of the deactivation, won for the hospital the Meritorious Unit Commendation for the period 1 Sep 1971–28 Jun 1974. This award was presented by RADM Charles L. Waite, MC, USN, assistant chief for operational medicine at the Bureau of Medicine and Surgery, during the deactivation ceremony. The award was accepted for the hospital by commanding officer CAPT Roger L. Alspach, MC, USN.

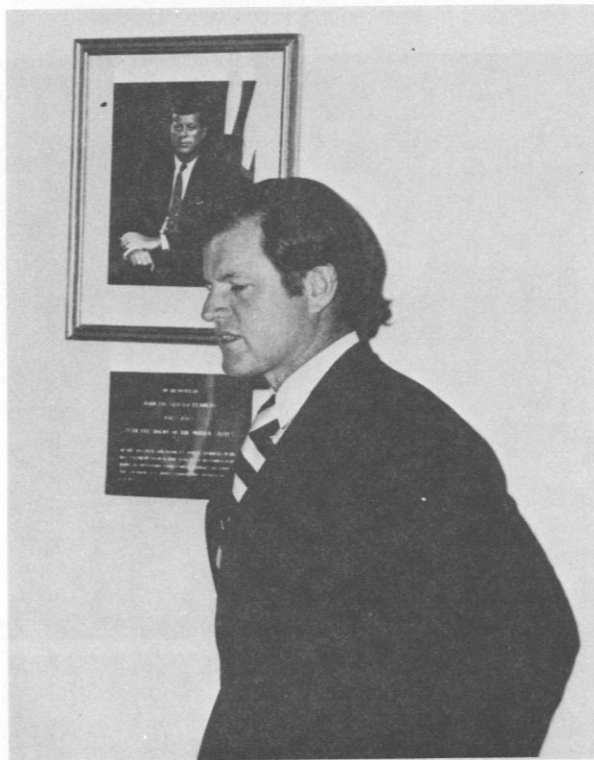
In his address during the deactivation ceremonies, RADM Waite commended staff members, their families, and all others who had supported the hospital over the years, charging them to continue their tradition of service wherever the future might lead them.



X-RAY THROUGH THE YEARS.—In 1919 the newest X-ray equipment was available to Navy patients at Nav Hosp Boston. As radiographic equipment and techniques improved through the years (see insert), the hospital maintained its tradition of providing quality care.



CHELSEA MORNING WAKE UP.—Outdoor exercise is commended to recuperating patients on an early Chelsea morning some years ago.



IN MEMORIAM.—At Nav Hosp Boston, Senator Edward M. Kennedy pauses before the photograph and bronze plaque which commemorate his brother, the late President John F. Kennedy. In 1971, Room 207 of the hospital was dedicated to the memory of the late President, who was a patient in the room from 11 Jun to 26 Dec 1944.

Benediction was then offered, with the Navy Band softly playing the Navy Hymn. To the lingering strains of "Auld Lang Syne," the commanding officer and



CLOSING REMARKS.—CAPT Roger L. Alspach, MC, USN, commanding officer of Nav Hosp Boston, Chelsea, addresses staff and guests during ceremonies that marked the disestablishment of the hospital on 28 Jun 1974.



SIDEBOYS SALUTE.—With a stiff upper lip during the deactivation ceremonies at Nav Hosp Boston, guest speaker RADM Charles L. Waite, MC, USN passes between rows of saluting "sideboys" dressed in uniforms of 1800 vintage.

guest speakers left the rostrum, closing forever the doors to this historic establishment.—LTJG Michael L. Todd, MSC, USN. 🇺🇸

U.S. NAVY RESEARCH ACTIVITY ESTABLISHED OVERSEAS

The U.S. Naval Medical Research Unit No. 5 (NAMRU No. 5) was established as a command on 1 July 1974. The Unit was created as a detachment of the U.S. Naval Medical Research Unit No. 3 (NAMRU No. 3), Cairo, Egypt, in December 1965 under terms of an agreement between the Ethiopian and U.S. governments to conduct research on medical problems of importance to the Navy and the host country.

At a cake-cutting ceremony establishing the new activity, CAPT Craig K. Wallace, MC, USNR, commanding officer, Naval Medical Research Unit No. 5, read the orders establishing NAMRU No. 5. CAPT James W. Fresh, MC, USN, executive officer, represented NAMRU No. 3, the previous command. Numerous congratulatory messages were read on the occasion, including one from the Surgeon General, VADM Donald L. Custis, MC, USN. An official reception was held at the U.S. Embassy in Addis Ababa. In addition to NAMRU No. 5 employees and their families, and other Department of Defense personnel, the guests included U.S. and Ethiopian government dignitaries, and directors of local hospitals and health-related agencies.

The Unit's base laboratory is located on the grounds of the Imperial Central Laboratory and Research Institute in Addis Ababa. A permanent Field Station is maintained at Gambela in the Western Lowlands, near the Sudan border. In addition, under agreement with the Haile Selassie I Foundation, the Unit operates a 22-bed clinical-research facility in St. Paul's Hospital,



CAKE-CUTTING.—The NAMRU No. 5 staff at Addis Ababa prepares to enjoy a pleasant repast on the inauguration day of their command, 1 Jul 1974.



THIS IS THE PLACE.—CAPT Craig K. Wallace, MC, USNR, CO, NAMRU No. 5, attaches new door plaque identifying his command.



EMBASSY RECEPTION.—At the NAMRU No. 5 inaugural reception are (from left to right): Mrs. L.L. Perine (her husband, Dr. Loring Perine is a NAMRU No. 5 staff member); CAPT Craig K. Wallace, MC, USNR, CO of NAMRU No. 5; LCDR J.H. Dodson, MSC, USN, and; Dr. H.E. Mesfin Fanta, Vice Minister of Public Health, Ethiopia.

Addis Ababa. The current scientific, technical, and supporting staff includes 21 officers and enlisted, and 56 civilian personnel. The present research program includes the following projects:

- Epidemiology of parasitic and arthropod-borne viral diseases
- Evaluation of drug susceptibility of malaria parasites
- Malaria vaccine field trials: pre-immunization profile of test population
- Pathophysiology and therapy of typhus fever, louse-borne relapsing fever, and other tropical infectious diseases of military importance
- Prevalence and control insect vectors
- Zoonoses of military importance. — N. Yanowsky, BUMED, Code 71D.

NAVAL INDOCTRINATION OF MEDICAL AND DENTAL OFFICERS

OFFICERS INDOCTRINATED AT NSHCA

Approximately 250 newly commissioned medical and dental officers participated in a 2-week indoctrination program (15-26 Jul) conducted at the Naval School of Health Care Administration (NSHCA), Bethesda, Md.

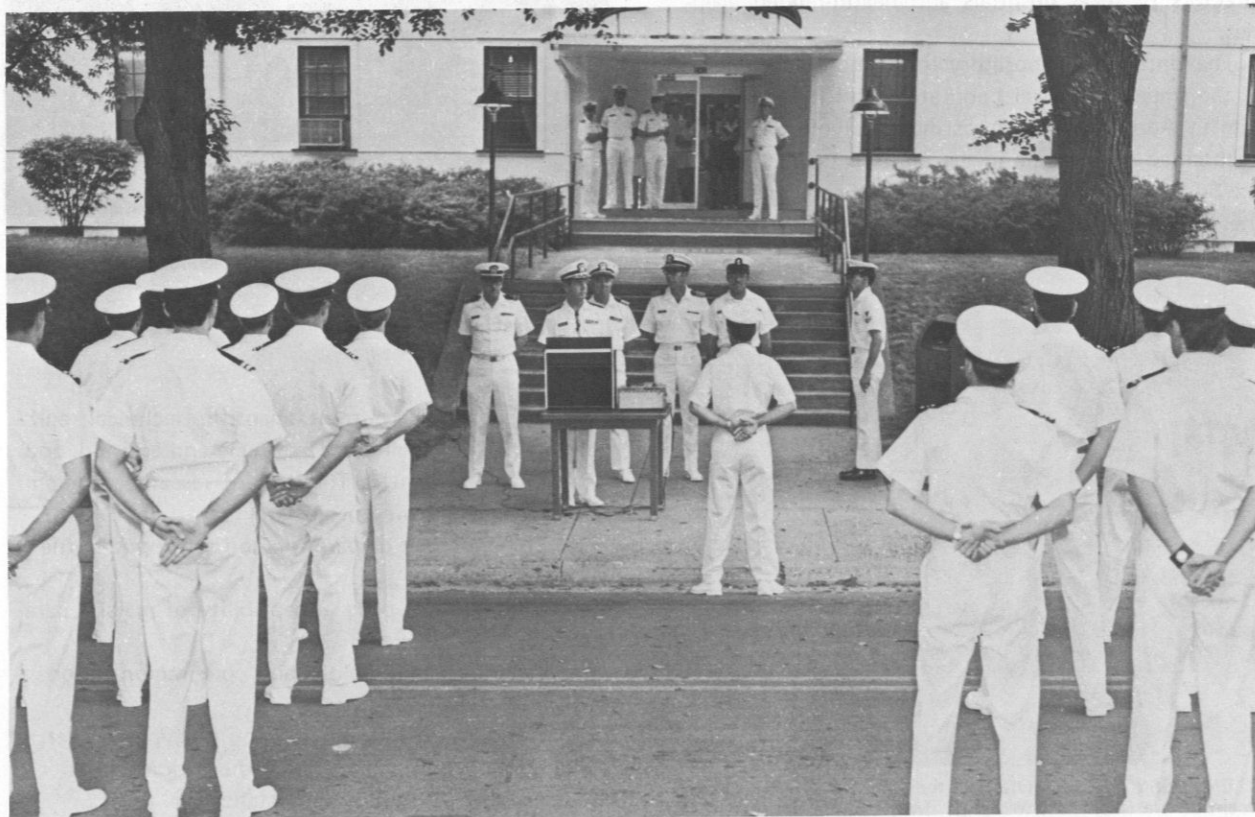
The indoctrinees were welcomed aboard by CAPT W.J. Green, Jr., MSC, USN, commanding officer of NSHCA; RADM R.G. Williams, Jr., MC, USN, commanding officer of NNMCMC and RADM G.D. Selfridge, DC, USN, commanding officer of the Naval Graduate Dental School formally opened the program with some introductory remarks.

For the past 3 years, successful orientation courses for initial-active-duty medical and dental officers have been held at the Armed Forces Staff College, Norfolk, Va., and at the Naval Amphibious School, Coronado, Calif. During the 10-day orientation at NSHCA the attendees completed a similar curriculum, one that is designed to familiarize them with the Navy and orient

them toward the military life-style. Specific course instruction has covered the following areas:

- Navy Familiarization (11 hours)
- Military Orientation (11 hours)
- Fleet Familiarization (2 hours)
- Drills and Inspections: (2 hours)
- Technical and Professional Area
- Presentations by selected physicians, dentists, nurses, and other health-care administrators (40 hours)
- Administrative Requirements (14 hours)

For the first week of the program, various naval personnel lectured to the officers on naval organization and regulations, the wearing of the naval officer's uniform, and on service etiquette. During the second week, the dental officers assembled in the Naval Graduate Dental School where the agenda for the week included discussions on: the history of the Navy Dental Corps,

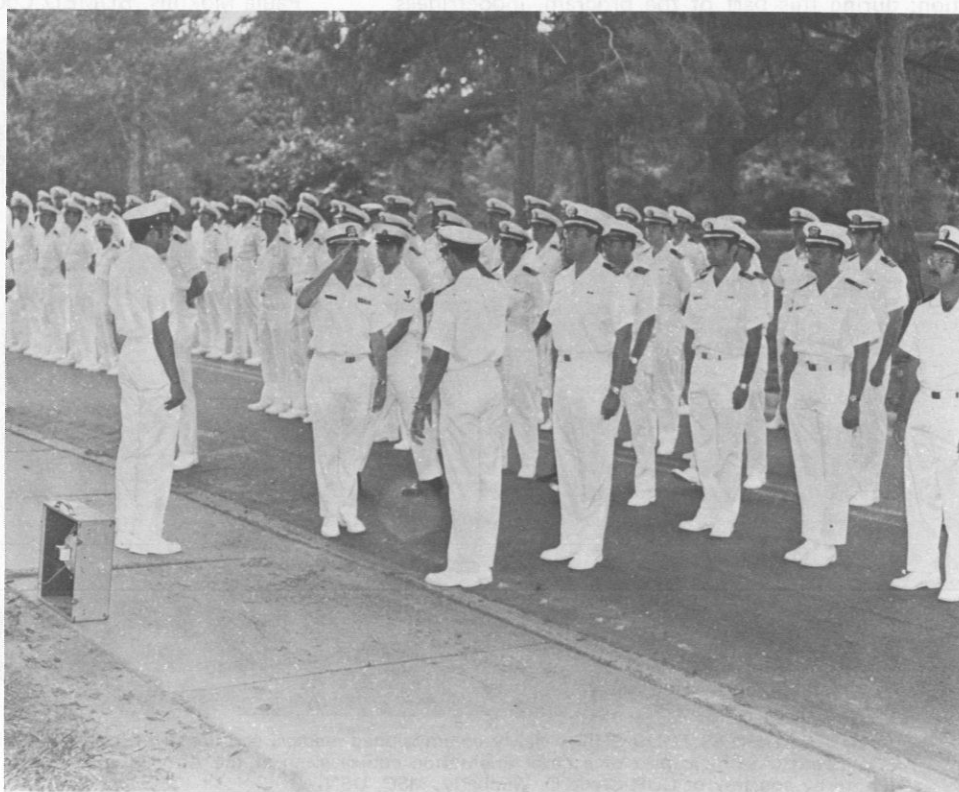


AT EASE.—RADM R.G. Williams, Jr., MC, USN (at podium), CO, NNMCMC, Bethesda, Md., addresses newly commissioned medical/dental officers, prior to a personnel inspection. This was the last day of a 2-week indoctrination course held at NSHCA, Bethesda. Standing behind the Admiral are (from left to right): LCDR R.B. Hinds, MSC, USN, academic director at NSHCA; CAPT W.J. Green, Jr., MSC, USN, CO, NSHCA; CAPT R.J. Leupold, MC, USN, XO, Naval Graduate Dental School; and HMC N.B. White, USN.



TEN-HUT.—Medical/dental indoctrinees at NSHCA are inspected by RADM R.G. Williams, Jr., MC, USN, CO, NNMC, Bethesda. Student company commander LCDR W.J. Lenz, MC, USNR follows behind the Admiral.

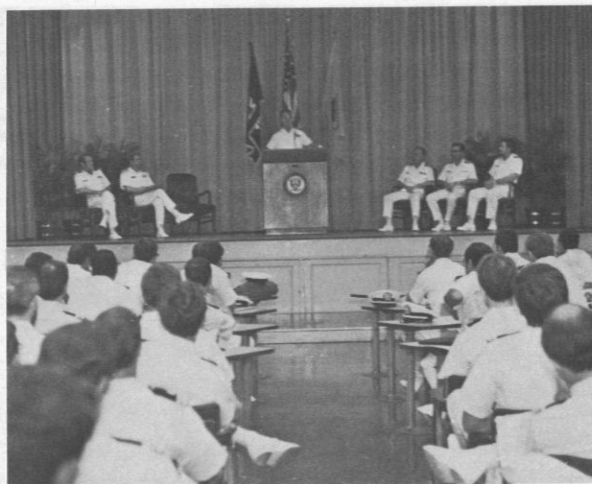
CARRY ON.—Newly commissioned officers at NSHCA pass inspection by RADM R.G. Williams, Jr., MC, USN (left of center), who salutes the company commander LCDR W.J. Lenz, MC, USNR (center).



the role of the dentist as a naval officer, and Dental Department organization. Like their counterparts, the medical officers met for lectures on medical regionalization, the respective roles of the Medical Department corps, and naval medical programs and organization.

Guest speakers during the 10-day program included RADM D.P. Osborne, MC, USN, Deputy Chief, BUMED, and the Honorable James R. Cowan, M.D., Assistant Secretary of Defense (Health and Environment), who spoke on the "Role of the Department of Defense in Military Medicine and Dentistry."

RADM A.G. Esch, USN, commandant, Naval District, Washington, D.C., addressed the indoctrinees at a graduation ceremony held on 26 Jul at NSHCA. These newly commissioned officers will be assigned to naval facilities both in CONUS and overseas, where they will be actively contributing to the medical/dental support of these commands.



GRADS MAKE GRADE.—RADM A.G. Esch, USN (at podium), Commandant of Naval District, Washington, D.C., addresses newly commissioned medical/dental officers at graduation ceremony held at NSHCA, Bethesda.

NORFOLK LAUNCHES OFFICERS

The Commander in Chief U.S. Atlantic Fleet sponsored and directed a 2-week medical/dental indoctrination course (8-19 Jul), at the Armed Forces Staff College in Norfolk, Va.

Two hundred and twenty medical officers and 53 dental officers attended the 3-part orientation program. The first day of the course was consumed by registration; during this part of the program, indoctrinees

receive a physical examination, immunizations, uniforms, and identification cards. The major portion of the course consists of orientation lectures held in the auditorium of the Armed Forces Staff College. To complete the indoctrination, the officers and their wives toured various ships and observed an amphibious landing at Camp Pendleton on Virginia Beach, Va.—Paula Mokulis, BUMED Code 18.



INDOCTRINEES TOUR SHIP.—Newly commissioned medical and dental officers and their wives toured the USS *L.Y. Spear* (AS-36) as part of a naval orientation course given at the Armed Forces Staff College in Norfolk, Va. (Photo by courtesy of CDR Clyde O. Wimberly, MSC, USN)

ARMY DENTAL CONTINUING- EDUCATION COURSES

A limited number of continuing education course quotas are available, allowing for selected Navy Dental Corps officer attendance at courses conducted by the U.S. Army. The course schedule is as follows:

Current Concepts in Restorative Dentistry

Letterman Army Medical Center,
San Francisco, Calif. 2-6 Dec 1974

Prosthodontics

USA Institute of Dental Research,
Washington, D.C. 21-25 Oct 1974

Preventive Dentistry

USA Institute of Dental Research,
Washington, D.C. 4-8 Nov 1974

Oral Surgery

USA Institute of Dental Research,
Washington, D.C. 13-17 Jan 1975

Letterman Army Medical Center,
San Francisco, Calif. 7-11 Apr 1975

Periodontics

Letterman Army Medical Center,
San Francisco, Calif. 27-31 Jan 1975

USA Institute of Dental Research,
Washington, D.C. 10-14 Mar 1975

Advanced Clinical Pathology of the Oral Regions

USA Institute of Dental Research,
Washington, D.C. 10-14 Feb 1975

Oral Diagnosis and Therapeutics

USA Institute of Dental Research,
Washington, D.C. 21-25 Apr 1975

Application procedures for continuing education courses are contained in the *Manual of the Medical Department*, Chapter 6, Section XVI.—BUMED, Code 61.

NEW DENTAL CLINIC FOR NATO

New dental facilities for American and British personnel stationed at the headquarters of the Commander Iberian Atlantic Area (COMIBERLANT) near Lisbon, Portugal, were opened on 29 Jul 1974. The \$12,000 dental clinic was officially declared ready for

business when RADM Robert B. Erly, USN, COMIBERLANT, cut a ribbon across a doorway. The Admiral commented that obtaining dental care for North Atlantic Treaty Organization (NATO) personnel had previously been like "pulling teeth."

A reciprocal NATO agreement requires the U.S. to furnish dental care, and the United Kingdom to provide medical care for IBERLANT personnel. Portuguese personnel stationed at IBERLANT have access to national facilities for routine care.

The new IBERLANT dental clinic is located in what once were underground war headquarters during World War II. The building that houses the clinic was originally a Portuguese fort, Reducto Gomes Freire, which was used to defend Lisbon in the 17th Century. This building features a moat type of construction found only in Portugal. To retain a feeling of history the gun portals in one wall of the clinic were glassed in, but were otherwise left unchanged.

The newest NATO command, IBERLANT includes nearly 600,000 square miles of ocean from Portugal's northern border to the Tropic of Cancer, and extends some 500 miles from the shores of Portugal into the eastern Atlantic. The command controls and protects shipping in this area, which includes the western approaches to the Straits of Gibraltar.—PAO, NATO Headquarters, COMIBERLANT, Oeiras, Portugal.



CUT-UPS.—Using a periosteal elevator, RADM R.B. Erly, USN (right) cuts a ceremonial cake to mark the opening of a new dental clinic at NATO Headquarters, COMIBERLANT. The cake was decorated with a large tooth and was inscribed "NATO Drill Team." On hand for the opening are LCDR Richard L. DeLong, DC, USN (left) and Acting Deputy, COMIBERLANT, CAPT Henrique Eduardo Vosgien de Noronha (center), Portuguese Navy.

HELIPORT NAMED FOR DECEASED DENTAL OFFICER

In ceremonies held 22 Jun 1974, the Dr. Thomas D. Stephenson Memorial Heliport at Ridgecrest, Calif., was named in memory of the Navy dental officer who was the first injured person transported to the heliport.

A former dental officer at the Naval Weapons Center (NWC), China Lake, Calif., CAPT Stephenson was injured last year in a fall near Jawbone Canyon; through the services of the not-yet-completed heliport, he was rushed to Ridgecrest Community Hospital, where he subsequently died two days later.

The new heliport was specifically designed to handle accident victims flown in from the High Sierra Mountains or the isolated areas of the nearby desert. The project was initiated three years ago by the China Lake Rotary Club, and was carried out with the cooperation of NWC officials and Ridgecrest civic leaders. The heliport was designed at no cost by a Bakersfield architect, the Navy donated the land, local Seabee Reservists helped prepare the site for construction of the landing pad, and a Bakersfield construction company provided the labor.

NWC commanding officer RADM Paul E. Pugh, USN, and Ray Van Aken, president of the Ridgecrest Hospital board of directors, attended the dedication



CAPT STEPHENSON—A heliport at Ridgecrest, Calif., has been named in honor of the late CAPT Thomas D. Stephenson, DC, USN. Last year, CAPT Stephenson was the first accident victim to use the services of the not-yet-completed heliport. Following a fall, he was transported from Jawbone Canyon to the Ridgecrest Community Hospital, where his injuries proved fatal.



HELIPORT DEDICATED.—Staff judge advocate CDR H.O. Brickson, USN (at podium) presides over the dedication of the Stephenson Memorial Heliport at Ridgecrest, Calif. The heliport was named in memory of Navy dental officer CAPT Thomas D. Stephenson, now deceased. Others attending the ceremony included (from left to right): Dan Butler, local Rotary Club president; Mrs. Geraldine Stephenson; Mrs. Shirley Stephenson; RADM Paul E. Pugh, USN, CO of Naval Weapons Center, China Lake, Calif.; and Ray Van Aken, president of the Ridgecrest Hospital board of directors.

ceremony which was conducted by CDR H.O. Brickson, USN, NWC staff judge advocate and president-elect of the local Rotary Club. Present for the unveiling of a memorial plaque were members of the Stephenson family, including CAPT Stephenson's mother Mrs. Geraldine Stephenson, and his widow Mrs. Shirley Stephenson.—*NWC Rocketeer*, Naval Weapons Center, China Lake, Calif. 🇺🇸

NNMC HOSTS IMPERIAL IRANIAN NAVY



DIGNITARIES VISIT.—RADM R.G. Williams, Jr., MC, USN (left), CO of the National Naval Medical Center (NNMC), Bethesda, Md., escorts RADM Sadegh Hariri, MC (right), Surgeon General of the Imperial Iranian Navy, and his aide CAPT Hooshang Beizaei, MC (right), Imperial Iranian Navy, on their recent visit to NNMC. In the background, CAPT W. Brannon, MC, USN (left), chairman of the Department of Neurology, confers with NNMC executive officer CAPT W.L. Long, MSC, USN.—PAO, NNMC, Bethesda, Md. (Photo by HM2 Garry Silk) 🇺🇸

TRAINING COURSE IN AUDIOMETRIC TECHNIQUES

A 4½-day course in audiometric techniques for Navy hearing-conservation programs will be offered 18-22 Nov 1974 at the Branch Dispensary, NAS North Island, San Diego, Calif. The course is sponsored by the Hearing Conservation Division, Naval Aerospace Medical Institute (NAMI), Pensacola, Fla.

Designed for selected hospital corpsmen (E-6 and below), health technicians, and nurses, the course will offer instruction in the operation and maintenance of manual audiometers, self-recording and group audiometers, and Navy hearing-conservation program procedures. This training qualifies technicians for the secondary Navy Enlisted Classification (NEC) 8591 (audiometric technician), and for certification by the Accreditation Council for Hearing Conservation Technicians; it also serves to disseminate information that can be carried back to the activities which must meet the current requirements of the Occupational Safety and Health Act of 1970.

This course has been planned to meet the needs of Western U.S. and Pacific area naval activities that have audiometric equipment. The next audiometric technicians' course for Eastern U.S. and Atlantic area activities will be held at NAMI in Feb 1975.—PAO, NAV-AEROSPREGMEDCEN, Pensacola, Fla. ☛

UNIQUE AMONG MSCs



OFFICER/ARCHITECT.—LCDR John E. Hendren, MSC, USN (right), the only active-duty MSC architect in the Navy, watches construction of the new Nav Hosp Pensacola, Fla., with his assistant LT David L. Vosloh, MSC, USN (left) and an unidentified civilian engineer. LCDR Hendren heads the Medical Facilities Projects Office at NAVAEROSPREGMEDCEN Pensacola, providing medical liaison services for 21 medical and dental construction projects throughout the Southeast United States.—PAO, NAVAEROSPREGMEDCEN Pensacola, Fla. ☛

FIRST FEMALE DENTAL STUDENT ATTENDS OIS

Though she won't go on active duty until next June, ENS Dorothy E. Knuppel, DC, USNR, is already making Navy history. She is the first naval female dental student to attend the Officer Indoctrination School (OIS) at Newport, R.I., having completed the four-week course last August. The 23-year-old ensign was the only woman in a class of 48 students.

ENS Knuppel will graduate from the University of Pennsylvania Dental School in June, and will begin her active duty naval career "for a minimum of two years — and possibly 30, if I like it."—PAO, OIS, Newport, R.I.



A FIRST LADY.—ENS Dorothy E. Knuppel, DC, USNR is the first female dental student to complete the 4-week course at the Naval Officer Indoctrination School at Newport, R.I. ☛

AMSUS MEETING

The 81st Annual Meeting of the Association of Military Surgeons of the U.S. (AMSUS) will be held 28 Oct-2 Nov 1974 at the Town & Country Hotel/Convention Center in San Diego, Calif.

All conferees must register.

Registration fee for active and life members, international delegates, and guests is \$10.

The program looks impressive. If you can get away from the office, better do it. ☛

OFFICIAL INSTRUCTIONS AND DIRECTIVES

BUMEDNOTE 6760 of 7 Mar 1974

Subj: Serial bitewing radiographs; mounting and retention of

Processed and dried bitewing radiographs will be placed in serial bitewing mounts (Navy Supply System stock no. NSN-6525-00-142-8732) as a permanent record in the Dental Folder (DD Form 722-1).

Dates when radiographs were made will be legibly inscribed in ink on the mount, below the appropriate films which should be mounted with the depression of the dot facing the observer, i.e., the front side of the mount. Standard positions of the films in the card-board mount must not be changed. Dental personnel may view radiographs from the labial or buccal aspect by turning around the mount itself.

BUMEDNOTE 6270 of 20 May 1974

Subj: Aerosol propellants containing vinyl chloride; hazards of

Use of pesticide products containing vinyl chloride, whether as an active or inert ingredient, is prohibited at all Naval activities.

Inhalation of vinyl chloride can result in acute toxicity manifested by an array of symptoms, including unconsciousness. Cardiac and carcinogenic effects, bone changes, and degenerative changes in the brain, liver, and kidneys have been reported in animals as a result of inhalation exposure to vinyl chloride. This ingredient has also been linked to liver cancer in workers engaged in polymerization of vinyl chloride to polyvinylchloride.

Naval personnel are advised not to purchase any of the aerosol pesticides listed below. Navy exchange retail stores and garden shops should remove these pesticides from their stocks.

PRODUCT	COMPANY
Brulin Bug Bomb	Brulin and Co.
Paracide with Sevin	Carson Chemicals, Inc.
Demert Raw Roach, Ant, Wasp Killer	Demert and Daugherty
Cobra International Roach, Ant, and Wasp Killer	*Cobra International
Rexall Ant and Roach Killer	*Rexall Drug Company
Walgreen Ant and Roach Killer	*Walgreen Laboratories, Inc.

PRODUCT

COMPANY (Con't)

Flea Killer for Dogs and Cats	Chase Products Company
Barcolene Spray Disinfectant	The Barcolene Company
Coop Dairy Insecticide for Milk Houses and Animals	Farmland Industries, Inc.
Excelcide 16-oz. Aerosol Bomb	The Huge Company
Navy Brand Thrifty 50	*Navy Branch Mfg. Company
Mothrid Moth Proofer	Hysan Corp.
Mothrid Moth Proofer Cedar Scented or Activated Moth Proof Spray Cedarized	*Liberty Products Company
Nokout 25 Aerosol Insecticide	Hysan Corp.
Strike — Wasp and Hornet	*Albert Woods Wholesale
Nokout 35 Insecticide	Hysan Corp.
Spritz Metered Air Sanitizer	Hysan Corp.
Anchor Flea, Lice, and Tick Bomb	Phillips-Roxane, Inc.
F-L-T Bomb	*Bio-Ceutic Laboratories
WAYNE, Flea, Lice, and Tick	*Allied Mills, Inc.
Rodgers' Insecticide and Repellent	Jay Rodgers Co.
Total Release Insect Fogger	Spray-Chem Corp.
Crown "Total" Complete Release Insect Fogger	*Crown Chemicals, Inc.
Roberts "Total" Complete Release Insect Fogger	*Roberts Laboratories
Chaperone Flea and Tick Killer	Sudbury Laboratory
Pyrethrin Insecticide Pressurized Dairy Insecticide	Woodbury Chemical Co.
COOP Pyrethrin Insecticide Pressurized Dairy Insecticide	*Farmland Industries, Inc.
Mid-Am Branch Pyrethrin Insecticide Pressurized Dairy Insecticide	*Mid-American Dairyman, Inc.

*Distributor of product.

BUMEDINST 6200.1D of 29 May 1974

Subj: Joint utilization of certain armed forces medical laboratory facilities

This instruction lists the location of, and briefly describes the services available at Army, Navy, and Air Force medical laboratories, environmental and preventive medicine units, and disease vector ecology and control centers. Services of these facilities are available,

upon request, to all installations of the three Services. There is no charge for the services; however, in some instances the department receiving services must provide funds for required travel and per diem expenses.

Requests for services will ordinarily be governed by geographical location, and will be honored as the capabilities of the various laboratories and units permit. Approval of requests involving travel of personnel between departments will rest with the Surgeon General of the Service upon whom the request is made. Material from suspected biological attack will be analyzed at the nearest supporting laboratory as a matter of priority.

Reports of epidemiological investigations will be sent to the Surgeon General of the Service performing the investigation, and to the senior medical officer of the installation requesting the service.

BUMEDNOTE 6320 of 29 May 1974

Subj: Medical/dental screening incident to transfer of naval personnel and their dependents outside CONUS

All Navy and Marine Corps members and their dependents must be properly screened, medically and dentally, prior to transfer outside the CONUS. Strict compliance with the provisions of BUPERSINST 1300.26E, BUPERSMAN 1830200, and TRANSMAN chapter 4, will significantly reduce the number of personnel being transferred to overseas areas when they are not physically qualified to perform their duties, or are in need of specialized medical/dental care not available at their new duty station.

Medical departments at transferring activities shall:

1. Maintain liaison with military personnel departments to insure sufficient lead time in planning overseas transfers, to allow for screening of the member and his dependents.

2. Insure compliance with the provisions of BUPERSINST 1300.26E (particularly par. 5 and note 9 of enclosure [3]), and MANMED art. 15-50, in determining suitability of naval members and their dependents for overseas transfer.

3. Insure compliance with BUPERSINST 1300.26E, TRANSMAN chapter 4, and MANMED art. 15-50, when personnel are considered unsuited for overseas transfer.

4. Advise all personnel whose dependents require specialized medical/dental or educational services that requests for special assignment considerations must be made in accordance with OPNAVINST 1300.9.

BUMEDNOTE 1220 of 29 May 1974

Subj: Master Chief Petty Officer of the Fleet/Force/Command Program

All current Master Chief Petty Officer of the Command (MCPOC) billets have been redesignated as Master Chief Petty Officer of the Fleet or Force (MCPOF) billets. All titles of Senior Enlisted Advisor, Chief of the Boat, Leading Chief Petty Officer, Master Chief Petty Officer of the Station, etc., will be changed to Master Chief Petty Officer of the Command, Senior Chief Petty Officer of the Command, or Chief Petty Officer of the Command, as applicable.

Commands shall support this revised MCPOF/MCPOC program to insure that communication lines are kept open and active between all enlisted personnel and the Surgeon General, through the enlisted representatives of the Medical Department. Commands shall redesignate appropriate personnel, publicize the establishment and purpose of the MCPOC within the command, identify in writing an enlisted representative for the command, and forward to BUMED (Code 13) a copy of the appointing letter showing the mailing address and office telephone number of the representative.

BUMEDNOTE 5040 of 10 Jun 1974

Subj: Naval Command Inspection Program

In accordance with the Naval Command Inspection Program, the Inspectors General, Medical and Dental, inspect all shore activities under the command/support of CHBUMED at least triennially. This notice provides a schedule of command inspections to be conducted through Dec 1975. It also lists the professional/technical visits to medical and dental departments of non-BUMED Command activities.

Activities will be contacted 2 months prior to the scheduled inspection to determine a specific inspection date.

BUMEDNOTE 4200 of 14 Jun 1974

Subj: Unethical selling practices

This notice warns Navy medical activities of companies offering premiums such as small electrical appliances, television sets, and watches, as an inducement to buy their products. Federal employees are forbidden to accept such gifts under the standards of conduct set

forth in SECNAVINST 5370.2E. Severe penalties can be imposed on offenders.

A detailed report of any such unethical and illegal selling tactics encountered to date should be submitted to BUMED on form MED 4200-2.

BUMEDNOTE 5450 of 18 Jun 1974

Subj: Health Sciences Education and Training Command; implementation of

As of 1 Jul 1974, education and training are represented in BUMED by a consolidated Office of the Director, Naval Medical Department Education and Training. The Naval Medical Training Institute is redesignated as Naval Health Sciences Education and Training Command (HSETC), with the following subordinate activities and detachments:

Naval Hospital Corps School, San Diego, Calif.
Naval Hospital Corps School, Great Lakes, Ill.
Enlisted Training Service, NAVREGMEDCEN, Portsmouth, Va.
Dental "A" and "C" Schools, Naval Dental Center, San Diego, Calif.
Naval School of Health Care Administration, Bethesda, Md.
Naval Aerospace Medical Institute, NAV-AEROSPREGMEDCEN, Pensacola, Fla.
Naval Undersea Medical Institute, NAVSUB-MEDCEN, Groton, Conn.

BUMEDNOTE 6230 of 20 Jun 1974

Subj: Other Service Veterans (OSVETS) and Naval Veterans (NAVETS) Program; immunization requirements for

This notice outlines policy regarding immunization requirements for other service veterans (OSVETS) and naval veterans (NAVETS) within their 2-week indoctrination period.

OSVETS and NAVETS should be considered to have had basic immunizations in accordance with BUMEDINST 6230.1G, even though prior Health Records are unavailable, unless there is firm evidence to the contrary. If OSVETS and NAVETS have not had basic immunizations, the indoctrination center shall use DD Form 877 (original and one copy) to request the Health Records from the National Personnel Records Center, General Services Administration, 9700 Page Blvd., St. Louis,

Mo. 63132. Forward the Health Record to the permanent duty station of assignment.

When practicable, administer yellow fever vaccine to potential Alert Force member if 10 years have elapsed from commencement of last period of extended active duty.

Give smallpox and cholera vaccines to individuals who must travel to their primary permanent duty station without being inconvenienced by international travel agreements.

Defer any other reimmunizations and tuberculin testing of these individuals until they reach their first permanent duty station.

Open a new Health Record and issue International Vaccination Certificates, PHS-731, with appropriate signed entries attesting that basic immunization series have been completed (BUMEDINST 6230.1G).

BUMEDNOTE 5000 of 1 Jul 1974

Subj: Bureau of Medicine and Surgery Situation Reports (BUMED SITREPS); information concerning

Approximately one issue of Bureau of Medicine and Surgery Situation Reports (BUMED SITREPS) is distributed each month by videocassette. All Medical Department personnel should be encouraged to see them. SITREPS released to date are:

TITLE	DATE
1. Assignment of MSC Officer to Command and Staff Billets	Aug 1973
2. A Personal Message From the Surgeon General	Oct 1973
3. Manpower Management Under Regionalization	Nov 1973
4. Navy's Physician Assistant Program	Dec 1973
5. Civilian Health and Medical Program of the Uniformed Services (CHAMPUS)	Jan 1974
6. Career Opportunities Through Medical Department Education and Training — A Career Lattice	Feb 1974
7. Five-Year Accelerated Medical Construction Program	Apr 1974
8. The Clinical Investigation Program	Jun 1974
9. Preventive Dentistry Program	Jul 1974

Official command and individual suggestions for ways to improve SITREPS are invited. Comments may be

sent either via the chain of command, or directly to: Chief, BUMED (Code 15), Navy Department, Washington, D.C. 20372.

Videocassettes should be returned to the address below so cassettes can be reused. If a command wants to retain a certain SITREP, a replacement cassette should be returned. Any questions concerning the cassettes can be directed to:

Medical Film Library
Naval Health Sciences Education and
Training Command
National Naval Medical Center
Bethesda, Md. 20014

BUMEDNOTE 1300 of 2 Jul 1974

Subj: Establishment of the Office of the Assistant Chief for Operational Medical Support in the Bureau of Medicine and Surgery

Effective 1 Jul 1974, a new Office of the Assistant Chief for Operational Medical Support (Code 5) was established at BUMED, headed by RADM Charles L. Waite, MC, USN. Details appeared in the "Notes and Announcements" section of *U.S. Navy Medicine* 64(3): 47-48, Sep 1974.

BUMEDINST 7301.3V of 8 Jul 1974

Subj: Temporary duty travel costs of Army and Air Force patients in naval activities

This instruction provides accounting classification data for transferring Army and Air Force patients during FY 1975. Funds will be made available for arranging temporary duty travel of these patients, according to the categories indicated below:

1. For temporary duty travel of Army (and *active-duty* Air Force) patients, and accompanying attendants (excluding patients of Uniformed Services personnel and their attendants), to, from, or between hospitals in connection with inpatient care, including return of attendants to proper station. This allotment does not apply to travel for outpatient medical or dental care.

2. For travel, as authorized by Joint Travel Regulations (JTR), of *dependents* of Army personnel, and necessary attendants, for the purpose of receiving medical care. Dependents of *active-duty* Air Force members, and their medical attendants, travel under the provisions of JTR paragraphs M7107 and M6400. Only

one nonmedical attendant may be authorized to accompany a dependent patient at Air Force expense.

3. For travel and per diem in oversea areas of active-duty Army personnel, assigned or attached to activities financed by other than Army funds, to receive outpatient medical or dental care when adequate military or civilian facilities are not available in the area of assignment. Except in an emergency, travel must be approved in advance by the medical facility (military or civilian) which will provide the care, or by other medical authority. (Travel of personnel assigned to *Army* activities is charged to funds which finance the unit to which the patient is assigned.)

BUMEDNOTE 1510 of 10 Jul 1974

Subj: Hospital corpsman training

Two new hospital corpsman technical specialties have been created: ocular technician (HM-8444), and otolaryngology technician (HM-8446). Training in both specialties is offered at the Naval School of Health Sciences, San Diego, Calif., and the Naval Health Sciences Education and Training Command, NNMC, Bethesda, Md.

HM-8484 is being deleted, along with its related training program. Personnel currently designated HM-8484 will be interviewed to determine which new specialty they are qualified for, based on past work experience and personal interest. A request for classification change (NAVPERS 1221) should be submitted to BUMED, Code 34.

BUMEDINST 1500.7C of 12 Jul 1974

Subj: Part-time outservice training; administration of

Provided funds are available, BUMED will authorize tuition aid for Medical Department personnel who obtain part-time outservice training in accredited civilian institutions. The training must directly relate to areas of Medical Department responsibility. Consideration will be given to requests for other courses if they satisfy required credits or prerequisites to desired courses in a fully planned program leading to a degree or certificate which will enable the applicant to assume increased responsibility, or to function more effectively in accomplishing the mission of the Medical Department.

Hospital corpsmen and dental technicians may be considered for training not directly related to areas of

Medical Department responsibility if the course relates to a professional improvement program leading to commissioned officer grade.

Applicants must be active-duty members of the Medical Department, either in the regular Navy or the Naval Reserve. Officers must agree to remain on active duty for 2 years beyond completion of the approved courses; enlisted personnel must have sufficient obligated service remaining to insure completion of the requested courses.

Requests for tuition aid should be submitted via the commanding officer and should be received in BUMED not later than 10 days before classes begin. A sample letter of application is included in this directive. The CO will review and forward all requests with his endorsement. Upon approval of the request by the appropriate BUMED code, a purchase order will be prepared and a copy forwarded to the requester via the CO. BUMED Code 464 will submit the purchase order to the training institution and process the invoice.

Aid is currently limited to 75% of the total cost of textbooks, tuition, and fees. No more than two courses totaling no more than 8 semester hours will ordinarily be approved for each semester. Personnel who withdraw prior to completion of courses must refund the expenses assumed by the Navy. If withdrawal is necessitated by circumstances beyond the student's control, his CO will determine whether the student is liable for expenses which the Navy has paid or agreed to pay.

Two copies of officers' scholastic achievement shall be forwarded to the Chief of Naval Personnel (Pers-3613) via the Chief, BUMED, to be recorded and filed in the official records. Procedures for reporting additional education are contained in Part E, *Manual of Navy Officer Classifications*, NAVPERS 15839B.

Successful completion of each course of instruction shall be recorded on page 4 of the enlisted service record, and in the individual's regular performance evaluation. One copy will also be forwarded to the Chief, BUMED.

BUMEDINST 5360.22A of 31 Jul 1974

Subj: Armed Services Graves Registration Office

The Armed Service Graves Registration Office (ASGRO) has been established to plan and direct registration of graves during periods of major military operations. As part of The Adjutant General's Office, Department of the Army, the ASGRO is governed by a

triservice coordinating group. During major military operations, the ASGRO will be the office of record for all the services, and the control point through which operational direction will be forwarded through the required channels to field activities.

BUMEDINST 5360.1B of 1 Aug 1974

Subj: Care and disposition of remains when multiple deaths of members of two or more services occur as a result of disaster or major accident

This regulation establishes the policies and responsibilities for recovery, identification, preparation, encasement, and shipment of remains when multiple deaths of members of two or more services occur, as a result of a disaster or major accident during peacetime.

The deceased member's branch of service will: if it so desires, assume custody of remains after identification for preparation, encasement, and shipment; be responsible for all communications with the next of kin; and defray expenses incurred in the care and disposition of identified remains. Problems concerning disposition of remains, which are not resolved readily in the field, will be referred for coordination and decision at the departmental level.

Procedures for processing remains to establish identification will be coordinated at the field level. When additional technical specialists are required to help in identification, field commanders will request certain designated headquarters, through channels, to furnish assistance. When remains cannot be segregated and individually identified, the activity having custody of the remains will report to its departmental headquarters for further instructions.

Selection of a national cemetery in which to inter a group of unidentified remains will be coordinated at the departmental level. Interment and escort costs will be paid from the funds of the service making the arrangements.

When disasters or major accidents occur in the continental U.S., the nearest military installation with the needed facilities and personnel will assume responsibility for the remains. When appropriate, military authorities will help and cooperate with civil authorities. In some overseas areas, responsibility for mortuary service has been assigned; where no such service has been designated, the military commander of the area in which the accident occurs will be responsible for the remains. ☸

UNITED STATES NAVY MEDICINE

CORRESPONDENCE AND CONTRIBUTIONS from the field are welcomed and will be published as space permits, subject to editing and possible abridgment. All material should be submitted to the Editor, *U.S. NAVY MEDICINE*, Code 18, Bureau of Medicine and Surgery, Washington, D.C. 20372.

NOTICES should be received not later than the third day of the month preceding the desired month of publication.

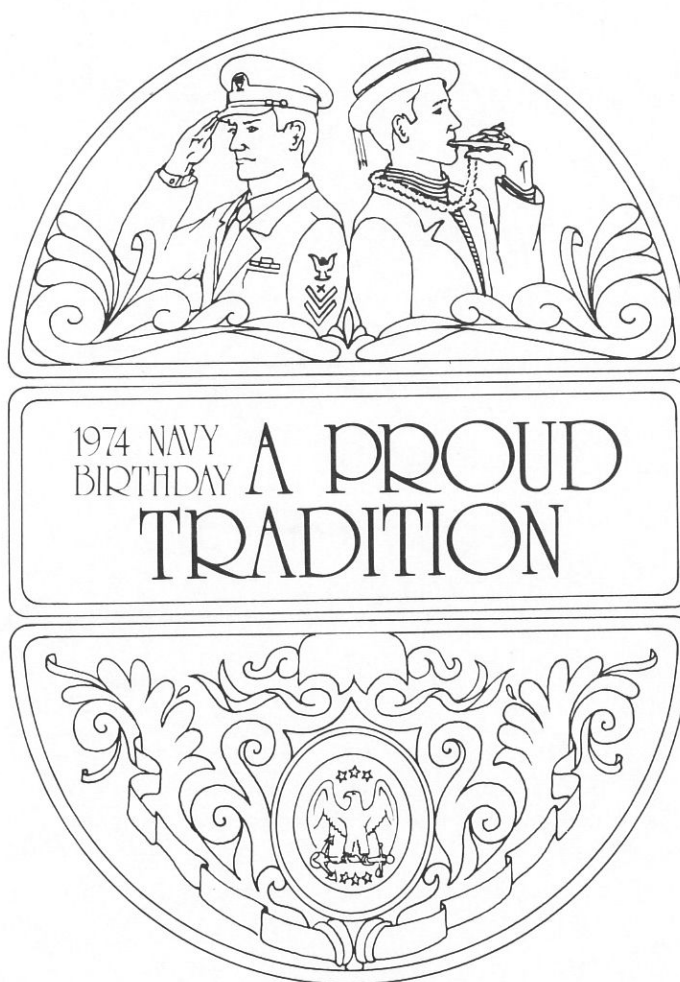
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